

HARVARD MEDICAL  
LIBRARY



RÖNTGEN

THE LLOYD E. HAWES  
COLLECTION IN THE  
HISTORY OF RADIOLOGY

☞ Harvard Medical Library  
in the Francis A. Countway  
Library of Medicine ~ Boston

VERITATEM PER MEDICINAM QUÆRAMUS





CATALOGUE G PART 9



X-RAY

APPARATUS

THE W. W. SCHEERER COMPANY

MANUFACTURERS  
OF  
ELECTRO-MEDICAL  
APPARATUS

NEW YORK, U.S.A.

FACTORY, OFFICE AND SALESROOMS  
404 TO 410 WEST 27<sup>TH</sup> STREET  
CORNER NINTH AVENUE



# X-RAY APPARATUS.

COMPLETE OUTFITS  
AND ACCESSORIES

FOR

## X-RAY LABORATORIES

FOURTH EDITION



The Kny-Scheerer Company

404 to 410 WEST 27th STREET

New York, U.S.A.

# CLASSIFIED INDEX

	Page
<b>TITLE PAGE</b>	
<b>CLASSIFIED INDEX</b> .....	2
<b>PREFACE</b> .....	3
<b>TERMS</b> .....	5
<b>GENERAL REMARKS</b> .....	6
<b>PRICE LIST</b>	
<b>a. Induction Coils</b> .....	7
<b>b. Interrupters</b>	
1. Mechanical Interrupters with a Reciprocating Motion .....	9
2. Mechanical Interrupters with a Rotary Motion .....	9
3. Electrolytic Interrupters .....	11
<b>c. Switchboards and Regulating Devices</b>	
1. Rheostats .....	13
2. Switchboards for Induction Coils with Mechanical Interrupter.....	13
3. Switchboards for Induction Coils with Electrolytic Interrupter.....	14
4. Switchboards for the Alternate Use of the Coils with the Mechanical and Electrolytic Interrupter .....	15
5. Switchboards for Instantaneous and Tele-Exposures .....	16
6. Modifications of the Switchboards.....	17
<b>d. Sources of Electric Current</b>	
1. Storage Batteries .....	19
2. Isolated Power-Plants .....	19
3. Motor Generator Sets .....	20
4. Generators .....	20
5. Electrolytic Valve Cells .....	20
<b>e. X-ray Tubes and Accessories</b>	
1. Valve Tubes .....	21
2. Spark Gaps .....	24
<b>f. Tube Holders and Tube Stands</b> .....	25
<b>g. Fluorescent Screens</b> .....	28
<b>h. Diaphragm Apparatus, Treatment, Skiagraphic and Examining Tables</b> .....	29
<b>i. Protective Appliances for Operator</b> .....	40
<b>k. Orthodiagraphs</b> .....	41
1. Measuring Devices .....	44
<b>m. Accessories for X-ray Laboratories</b> .....	29
<b>n. Accessories for Radiography</b> .....	53
<b>o. Equipment for the Dark Room and Positive Process</b> . . . . .	63
<b>p. Suggestions for X-ray Installations</b> .....	64
<b>q. Assortments of Accessories for X-ray Laboratorie</b> .....	74

## APPENDIX

<b>Abridged List of Apparatus for High Frequency Therapy</b>	
Arsonvalisation.....	76
Fulguration .....	77
<b>Alphabetic Index</b> .....	78



## PREFACE



SINCE the publication of our last X-ray Catalogue, in 1905, no inventions of epoch-making importance in the domain of the X-ray technique have become known, despite the fact that physicians, physicists and X-ray technologists have been assiduously at work in the attempt to perfect this young branch of science.

The progress made during this time refers to the more extended and deepened application of the rays in diagnosis and therapy, to an improvement of known devices and the construction of a few new special instruments.

No doubt many new models of X-ray apparatus and auxiliary instruments have been put upon the market, but only few of them could satisfy for any length of time the practical requirements in regard to facile handling, reliable and economic operation and pleasing appearance.

The selection of the new apparatus, which have found a place in the present Catalogue, has therefore been made with strictest regard to the above considerations, and all the devices admitted to these pages are guaranteed as to their reliability.

In the accomplishment of this task we had the continued valuable support of prominent Roentgenologists, who unselfishly allowed us to profit by their practical experience; and we take this opportunity to express our sincere thankfulness for all these friendly suggestions, which have been placed at our disposal in the past, and a continuance of which we shall with equal gratitude acknowledge in the future.

THE REINIGER, GEBBERT & SCHALL *Company, of Erlangen, Germany*, which has recently consolidated with the well-known firm of W. A. HIRSCHMANN, *of Berlin, Germany*, has established with us a system of practical interchange of ideas resulting from experiments on both sides, which we have found to be of great value. Both establishments above mentioned have for a great many years enjoyed the reputation of being the leading houses of the world in the electro-medical field and particularly in that of X-ray technique.

These advantages have placed us in a position to entertain gratifying relations with authorities in London, Paris, Vienna, Berlin and Hamburg, so that in our Central Office there is a steady confluence of important new impulses and ideas, all of which undergo careful study and investigation at the hands of our technically trained staff.

In the manufacture of our goods thoroughly reliable construction is our first and leading principle. At the same time we attach the utmost importance to the handy and practical arrangement of all parts, taking particular care to protect the operator against the effects of rays and the accidental contact with current carrying parts.

The most effective and practical method for the prevention of X-ray burns consists in shielding off the undesired rays at the source, the X-ray tube, which policy is represented in our diaphragm apparatus.

All of our apparatus are built with due regard to the rules established by the National Board of Fire Underwriters.

## *X-RAY APPARATUS—Preface.*

---

Each apparatus supplied by us is accompanied by precise directions for use. Their careful observation will place the physician in a position to erect, ready for use, any of our apparatus without the assistance of an electrician, should such be desired.

The attention we have always devoted to all instruments and apparatus applicable in X-ray technique, of course also includes the auxiliary instruments and articles of consumption, and it is needless to state that also in this respect we have succeeded in supplying our clients with the very best.

Thus we have acquired a number of Patents and sole control for the United States and Canada of important inventions, of which we mention:

*WEHNELT'S Electrolytic Interrupter, U. S. Patent No. 670,142.*

*MUFFLER for Wehnelt's Electrolytic Interrupter, Patent Applied For.*

*ORTHODIAGRAPH, M.-L.-D., U. S. Patent No. 720,599.*

*X-RAY PLATES, Schleussner's Double Coated.*

*X-RAY TUBES, Mueller's Genuine, Various Types.*

Each one of these objects enjoys such excellent reputation with the professional X-ray operator, that it will hardly be necessary at this place to point out their particular advantages, but in the interests of prospective purchasers we feel compelled to earnestly caution against the acquisition of illegal, and as a rule, much inferior imitations of above apparatus.

In addition to the information contained in this Catalogue, we are always prepared to furnish special estimates upon request, and respectfully court inquiries to that effect.

We are particularly desirous of submitting plans and estimates for installations of complete X-ray laboratories for specialists and sanatoria. In this particular branch our experience is of the widest, and interested physicians, superintendents of hospitals, etc., are cordially invited to avail themselves of the services and advice of our experts.

We wish to call attention to our extensive exhibit of Electro-Medical Apparatus, at our premises, where the same are demonstrated under working conditions.

Respectfully,

**THE KNY-SCHEERER CO.**

*No. 404-410 W. 27th St., corner 9th Ave.*

*Electrotypes.*—To authors writing text-books, articles in periodicals, etc., we cheerfully furnish our electrotypes without charge.





Thorax, taken with Intensifying Screen  
in  $\frac{1}{25}$  th. of a second at a distance of 24 inches.



Stomach, taken with Intensifying Screen  
in  $\frac{1}{15}$  th. of a second at a distance of 24 inches.



## TERMS



HIS Catalogue supersedes former editions and all previous quotations are herewith cancelled.

When describing apparatus please refer to catalogue numbers so as to insure accurate execution of orders. The privilege is reserved to deviate from details of designs as represented by illustrations whenever by desirable changes in construction the efficiency of an apparatus can be improved.

All the goods quoted in this catalogue are ordinarily kept in stock so can be forwarded within a reasonably short time after receipt of order. The latter will be acknowledged promptly and the probable date of shipment given.

Whenever instruments and apparatus have to be made specially to order and vary from our regular catalogue patterns a deposit equal to 25% of their approximate is to be paid in advance. Such special goods cannot be returned for credit or exchange.

In the absence of specific instructions, goods will be despatched by the route that commends itself to our judgment as the most expeditious, secure and economical.

We employ a staff of skilled packers and use every precaution to insure safe transit. Goods are delivered by us free to transportation company and after obtaining from the latter receipt acknowledging that our shipment has been taken over "in good order" our responsibility for damage or breakage ceases.

**We are prepared to insure our goods against damage or breakage in transit at the following rates:**

**SEVEN PER CENT. of invoice value on all glass ware including X-Ray tubes.**

**THREE PER CENT. of invoice value on all other apparatus.**

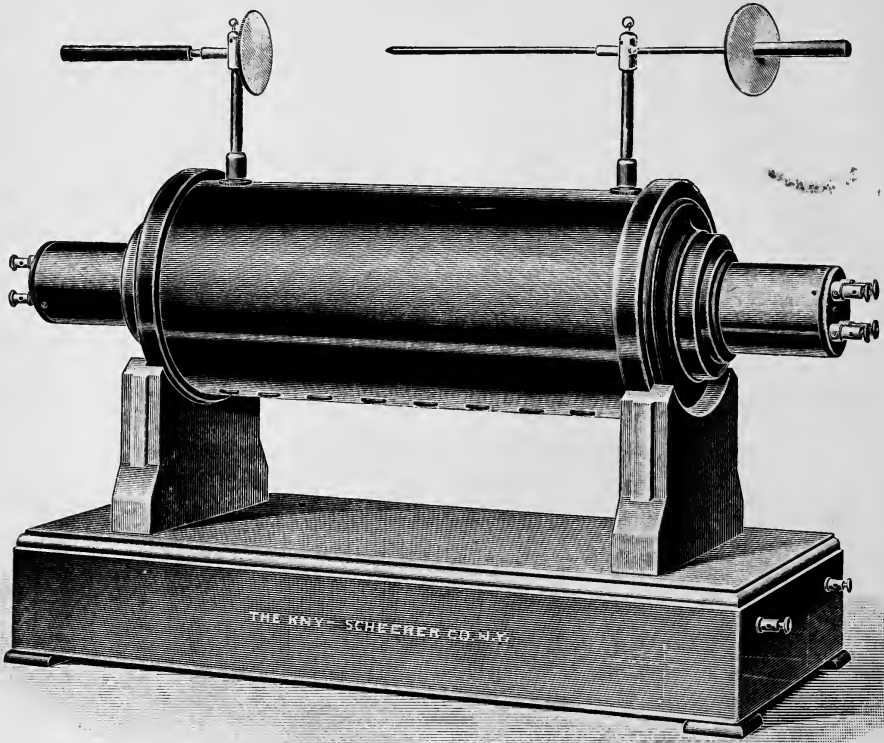
**OUR TERMS are net cash.** All accounts due and payable after 30 days from date of invoice; interest to be charged on accounts overdue.

A cash discount of 2% will be allowed on all bills paid within ten days from date of invoice.

It is desirable that names and addresses of customers should be distinctly written. Prospective purchasers will facilitate prompt execution of their orders by furnishing New York Trade references as to their financial responsibility.

**EXPORT ORDERS** must be accompanied by remittance in full, or by satisfactory New York or London Trade references. Bankers' drafts, drawn at sight on New York or London Agents, or Post Office Orders, are the most advantageous methods of sending cash. On large foreign orders we are prepared to accept 25% of the value with the order and draw for balance through a banker against delivery of bill of lading.

## Roentgen-Rays.



Induction Coil with Condenser.

### General Remarks.

Roentgen Rays, called X-rays by their discoverer, are, in the light of our present knowledge, an indisputed, first class diagnostic agent in both surgery and internal medicine, results being always instructive and demonstrative.

Roentgenoscopy or Radioscopy, the translumination with the screen, and Roentgenography or Radiography, the photography with X-rays, serve, amongst other purposes, to determine the position and size of foreign bodies in the human organism. Further, for the:

Examination of all kinds of fractures, control of their setting and the healing process generally, without removing plaster bandage and splints,

Diagnosis of luxations, pseudo-arthritis, and affections of the joints,

Discerning the thickening of the tubular bones,

Demonstration of osteosarcoma, sequestra, myositis ossificans,

Establishing the true shape, size and position of the heart and viscera of the thorax and stomach,

Demonstration of arterio-sclerosis,

Demonstration of vesical, renal and gall stones.

## *X-RAY APPARATUS—Induction Coils.*

Furthermore, X-ray examination permits recognition of changes of the œsophagus and stomach.

Chemismus of the stomach,

Migration of Murphy buttons, inserted in gastro-intestinal operations,

Fæcal occlusions of the intestines,

Aneurysms of the aorta,

Mediastinal tumors,

Changes of the lungs.

For therapeutical purposes the X-rays render excellent service in: the treatment of Lupus vulgaris, Carcinoma, Nævus vasculosus, Chronic eczema, Hypertrichosis, Favus, Sycosis, Mycosis, Folliculitis, Furunculosis, Acne, Herpes, Leucæmia etc.

### **a. Induction Coils.**



Induction Coil on Wall Bracket.

As the result of the co-operation of the electrical engineer with the physicist, the former contributing his experiences as specialist in the design of commercial transformers for light and power transmission, the efficiency and reliability of the early types of induction coils, representing a specimen of transformer, have been materially improved of late.

Rigid methods in the selection of the material were adopted and the manufacture divided into distinct and separate sets of operations, each one performed by a specialist and subject to closest scrutiny by trained inspectors. The finished coils are submitted to a final test in regard to insulation, spark length and intensity of discharge. These new designs are characterized by a large magnet core, consisting of many thin laminations of a special grade of soft iron carefully insulated from each other. A low inductive resistance of the secondary coil and a strong magnetic field, produced by the long and thick primary core assure economic operating conditions in regard to the consumption of energy and the useful life of the tubes. Proper insulation and ample cross section of the wires exclude possible break down and undue heating during continuous operation at the full capacity of the apparatus.

---

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

## X-RAY APPARATUS—Induction Coils.

For alternating current a special coil with an extra large magnet core, few turns on the primary and many turns on the secondary coil, has been designed and is giving excellent results.

The primary coil is provided with

- 1) Two binding posts, where a mechanical interrupter is used.
- 2) Eight binding posts for four variations of self induction, which are selected on the switchboard by means of a selector switch if the electrolytic interrupter is used. This arrangement permits the adaptation of the secondary voltage to the vacuum of the respective X-ray tube, minimizing the closing current, thereby insuring economical operation of all X-ray tubes, irrespective of their vacua.

The condenser, necessary for coils operated with mechanical interrupters, is usually placed in the mahogany base of the coil.

*N. B. To facilitate ordering and to avoid delays, we recommend the use of the Information Blank herewith.*

### INDUCTION COILS.

Catalogue No.	Without Condenser	Price	Spark Length	Catalogue No.	With Condenser	Price
G/. .5408	Code LORD	\$ 90 00	8 inch	G/. .5458	Code LUGDU	\$ 95 00
G/. .5410	" LORKE	115 00	10 "	G/. .5460	" LUGGA	120 00
G/. .5412	" LORRY	165 00	12 "	G/. .5462	" LUGUB	170 00
G/. .5416	" LOSKO	240 00	16 "	G/. .5466	" LUISS	250 00
G/. .5418	" LOSNE	275 00	18 "	G/. .5468	" LUIZ	285 00
G/. .5420	" LOSZ	325 00	20 "	G/. .5470	" LUKGE	335 00
G/. .5424	" LOTWU	400 00	24 "	G/. .5474	" LUKZ	410 00
G/. .5428	" LUXA	525 00	28 "	G/. .5478	" LUXOR	535 00

*Prices of larger coils on application.*

G/. .5490 **Special induction coils for alternating current** of about 10" spark length \$120.00  
Code LUPIL

G/. .5493 The same, of about 16" spark length..... 280.00  
Code LURID

### MODIFICATIONS OF THE STANDARD MOUNTINGS:

- a) Wall bracket, instead of the regular base as support for the induction coil increases the price by..... \$7.50
- b) Pole changing switch, mounted on to base of the 8" or 10" coils, increases the price by..... 7.50
- c) Special winding of the primary coil for four degrees of multiple inductance and binding posts mounted onto hard rubber end at primary tube.  
Additional price..... 15.00

*This arrangement is recommended for induction coils of from 12" upwards, which are used in connection with electrolytic interrupters.*

*N. B. Spark coils for use in the Tropical climates, or in very warm rooms, are furnished with a special insulation of a high smelting point, which increases the list prices by 10%.*

---

THE KNY-SCHÉERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

## b. Interrupters.

### 1. Mechanical Interrupters with a Reciprocating Motion.

G/..5510 Code LUZEI	<b>Precision Platinum Interrupter</b> mounted on to the iron core of the primary coil, suitable for induction coils up to 10", and 32 Volts, with adjustment for the variation of the number of interruptions .....	\$27.25
G/..5511 Code LUZID	<b>Mercury Dip Interrupter</b> , mounted on to the iron core of the primary coil, consisting of a cup with mercury, into which a copper wire dips alternately, thereby making and breaking the current. A layer of petroleum or alcohol serves to suppress the formation of a spark. The duration of the contact is varied by raising or lowering the mercury cup. Suitable for coils up to 10", and voltage up to 32 Volts.....	14.50

### 2. Mechanical Interrupters with a Rotary Motion.

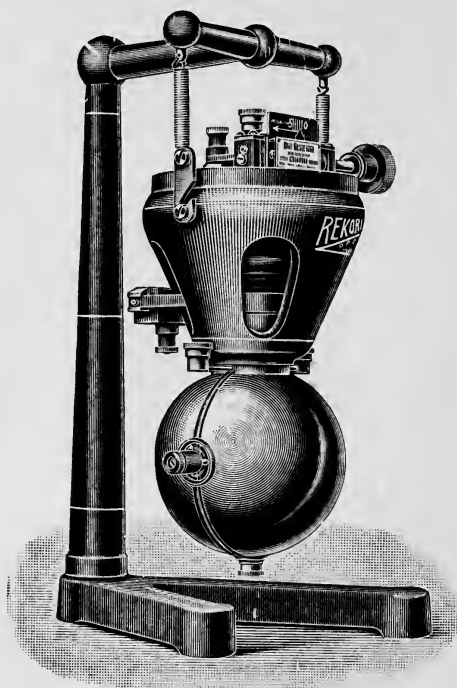
#### SLIDING CONTACT INTERRUPTER.

This interrupter is remarkable for its simplicity of construction, small quantity of mercury required, and the perfect contact obtained. It is very reliable and economical, and eminently suitable for therapeutic treatment, fluoroscopic work, and orthodiagraphy, to which it has been applied for several years with best results.

G/..5515 Code LYSH	<b>Sliding Contact Interrupter</b> , driven by a motor with plain iron armature, which is alternately attracted and repulsed by an electromagnet, connected in series with the primary coil, suitable for from 24 to 32 Volts .....	\$40.00
G/..5516 Code LYCOG	The same, for currents up to 110 Volts .....	40.00
G/..5517 Code LYCUR	<b>Sliding Contact Interrupter</b> , with independent motor for currents up to 34 Volts .....	50.00
G/..5518 Code LYDAS	The same, with motor for 65 to 125 Volts .....	50.00
G/..5519 Code LYGDA	The same, with motor for 150 to 220 Volts .....	52.00
G/..5520 Code LYGOD	The same, with alternating current motor for installations with alternating-direct current motor generator set .....	75.00
G/..5521 Code LYKAR	<b>Mercury</b> , commercially pure, per pound .....	1.20



THE "REKORD" INTERRUPTER.

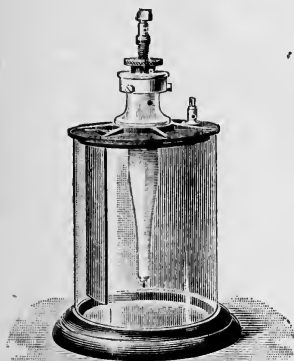


G/..5526-29

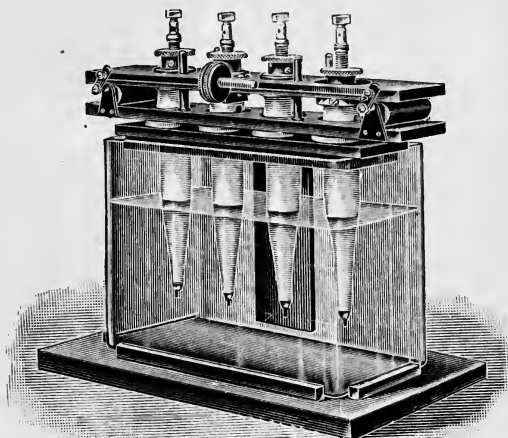
This new design of a mechanical interrupter is based upon mechanical and scientific principles, which the experience of many years of work with this class of apparatus has proven to yield the best results. It gives a number of interruptions nearly as high as the electrolytic interrupter and always a perfect and uniform contact and interruption. The emulsification of the mercury is insignificant, owing to the centrifugal pressure which keeps the mercury a coherent mass and separates it constantly from impurities. The light on the fluorescent screen is bright and steady and even radiographs taken at very short exposures show a remarkable degree of definition.

G/..5526	"Rekord" Interrupter for currents up to 32 Volts, including motor and mercury .....	\$75.00
Code LYMPH		
G/..5527	The same, for direct current up to 125 Volts.....	75.00
Code LYNXE		
G/..5528	The same, for direct current up to 220 Volts.....	75.00
Code LYPOR		
G/..5529	The same, for direct current up to 220 Volts, with condenser mounted into dull finished oak case, with selector switch for different capacities and wire sliding rheostat for tuning the interrupter to the induction coil .....	92.50
Code LYPSE		
G/..5530	Condenser, only .....	25.00
Code LYZZI		
G/..5531	Rheostat for varying the speed of the motor and consequently the frequency of interruptions mounted on polished hardwood base....	15.00
Code LYKEW		

## 3. Wehnelt Electrolytic Interrupter.



G/.5535



G/.5540/41

Since Professor Wehnelt discovered that an electric current sent through an electrolyte by means of two electrodes of unequal surface area, under a voltage largely surpassing polarization tension in opposite direction, produces perfect interruption of the circuit, and since his first application of this new interrupter to induction coils, this device has occupied an exclusive position among all types of interrupters.

The distinctive features of the Wehnelt Electrolytic Interrupter are: Highest working capacity and widest range of regulation, combined with simplicity of apparatus and manipulation.

It gives excellent results with the direct as well as with the alternating current; for operation with the latter, however, it is advisable to use the interrupter in series with a valve cell, which, in suppressing the closing current, protects the platinum anode against deterioration.

G/.5535	<b>Electrolytic Interrupter</b> , with 1 platinum anode of 1 m.m. in diameter..	\$20.00
Code MAACA		
G/.5536	<b>Electrolytic Interrupter</b> , with 1 platinum anode of 2 m.m. in diameter..	23.00
Code MAAGS		
G/.5537	<b>Electrolytic Interrupter</b> , with 1 platinum anode of 3 m.m. in diameter...	30.00
Code MILTO		
G/.5538	<b>Electrolytic Interrupter</b> , with 3 platinum anodes for coils with variable self-induction .....	60.00
Code MAAND		
G/.5539	The same, with 4 platinum anodes.....	80.00
Code MAASK		
G/.5540	The same, with 3 heavy platinum anodes, <i>connected in parallel, and used for instantaneous and tele-radiography</i> .....	75.00
Code MAATA		
G/.5541	The same, but with a fourth anode.....	90.00
Code MABUR		

### NOTICE.

Attention is called to the fact, that we have acquired by purchase U. S. Patent, March 19th, 1901, covering Wehnelt's invention of an Electrolytic Interrupter, and that we shall protect our rights by prosecuting all infringements which may be brought to our notice.

Wehnelt's Electrolytic Interrupters, if genuine, must bear our Trade Mark, and in addition our firm-name and registered factory number.

#### 4. Caldwell's Diaphragm Interrupter.

The Diaphragm Interrupter of Caldwell is constructed on similar principles. Into a jar containing diluted sulphuric acid is placed a beaker of hard bisque porcelain in which is a small hole. Lead electrodes are placed in the outer jar and in the insulating cup.

When the primary current of the induction coil is passed through this apparatus there is comparatively little heating of the liquid, except in the aperture connecting the two chambers where the current density is very great on account of the small aperture. Here the liquid is vaporized and bubbles of steam, which are continuously forming, break the connection between the liquid in the inner jar and that in the outer jar. The frequency of the interruptions depends largely upon the strength of the current, the size of the aperture and the resistance of the electrolyte.

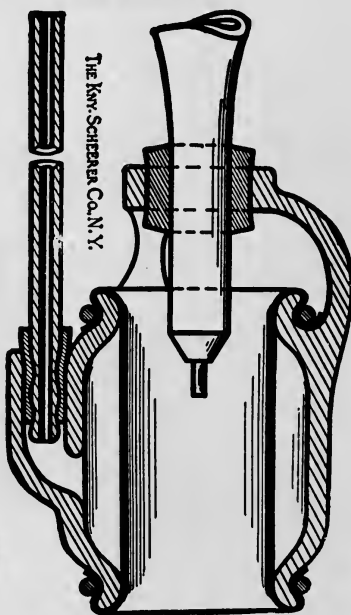
G/.5543 Caldwell's Diaphragm Interrupter..... \$15.00  
Dode MACCU

#### Muffler for the Wehnelt Electrolytic Interrupter

(U. S. Patent applied for)



G/.5538



G/.5541  
Wehnelt's Muffler.



G/.5543  
Caldwell's Interrupter.

There are two slight drawbacks connected with the use of this Electrolytic Interrupter, namely: its noise and the generation of sulphide of hydrogen gas during operation, but as the advantages previously mentioned far outweigh these drawbacks, the instrument has been installed in the largest and best equipped laboratories, the objectionable noise and odor being overcome by placing the Interrupter in a separate room where it gives no cause for complaint.

We have now succeeded in producing a simple, effective and inexpensive muffler, which can be readily attached to any of our electrolytic interrupters and which reduces the noise so effectually that the apparatus may be placed in the X-ray laboratory. In order to avoid the evaporation of the diluted sulphuric acid, the latter is covered by a layer of paraffin oil from one to two inches thick.

G/.5541 Muffler for Wehnelt Electrolytic Interrupter, ..... \$4.00  
Code MABEL

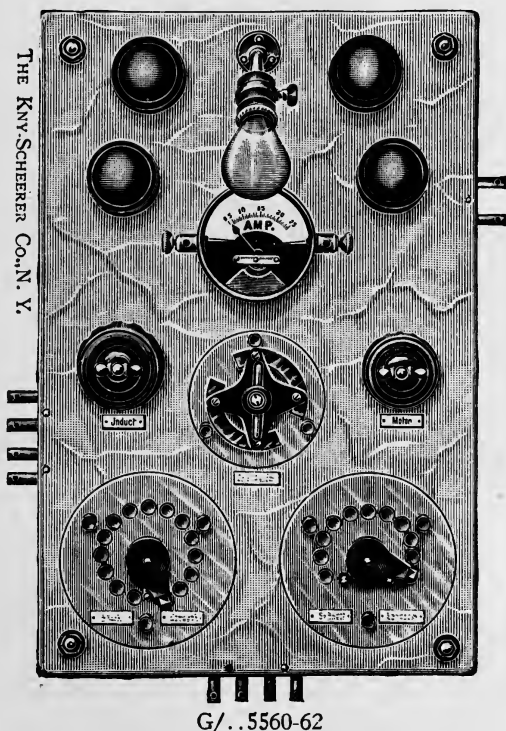
### c. Switchboards and Regulating Devices.

In order to obtain the greatest convenience in the management of an X-ray apparatus, we have endeavored to centralize all regulating devices, such as switches, pole changers, rheostats, measuring instruments, fuses, and so forth. The X-ray tube can thus be used at such a distance from the induction coil, that the variable magnetic field of the primary coil will not deflect the cathode rays, a cause to which often unsatisfactory radioscopic or radiographic results must be attributed.

#### 1. Rheostats.

G/..5550	<b>Series Rheostat</b> , for coils operated on the direct current from 65 to 125 Code <i>MACUB</i> volts, with mechanical interrupter .....	\$35.00
G/..5551	<b>Shunt Rheostat</b> , for coils supplied with direct current of from 150 Code <i>MACZA</i> to 220 volts used with mechanical interrupter.....	44.00
G/..5552	<b>Series Rheostat</b> , for coils operated on the direct current of from Code <i>MADAB</i> 65 to 125 volts in connection with Wehnelt Interrupter, or with Caldwell Interrupter on direct current of from 150 to 220 volts....	40.00
G/..5553	<b>Shunt Rheostat</b> , for coils operated on the direct current or from 150 to Code <i>MANFU</i> 220 volts with Caldwell Interrupter .....	60.00

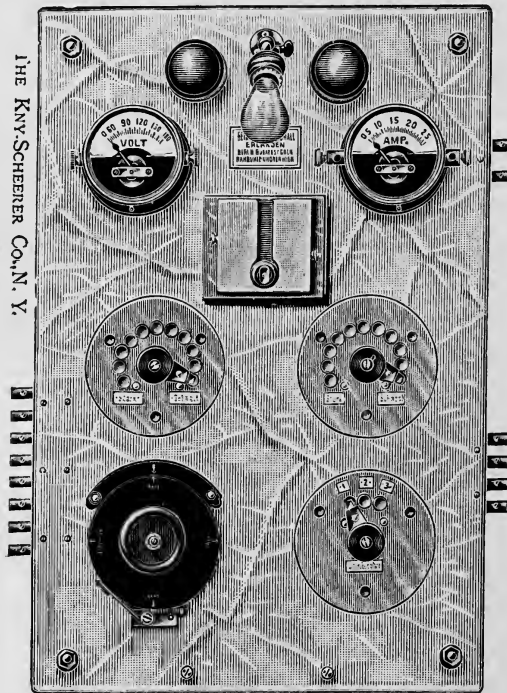
#### 2. Marble Switchboards for Induction Coils with Mechanical Interrupters.



G/..5560	<b>Switchboard for Direct Current</b> of from 65 to 120 volts, consisting Code <i>MANNA</i> of a marble wall plate, mounted with the necessary regulating and controlling devices, and 1 amperemeter .....	\$90.00
G/..5561	The same, for direct current of from 150 to 220 volts.....	100.00
G/..5562	The same as No. 5560, for use in connection with a single phase Code <i>MANOI</i> motor-generator-set of 1 horse power, with lamp and connection for the motor to the alternating current circuit.....	88.00

THE KNY-SCHAEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

## 3. Marble Switchboards for Induction Coils with Electrolytic Interrupters.

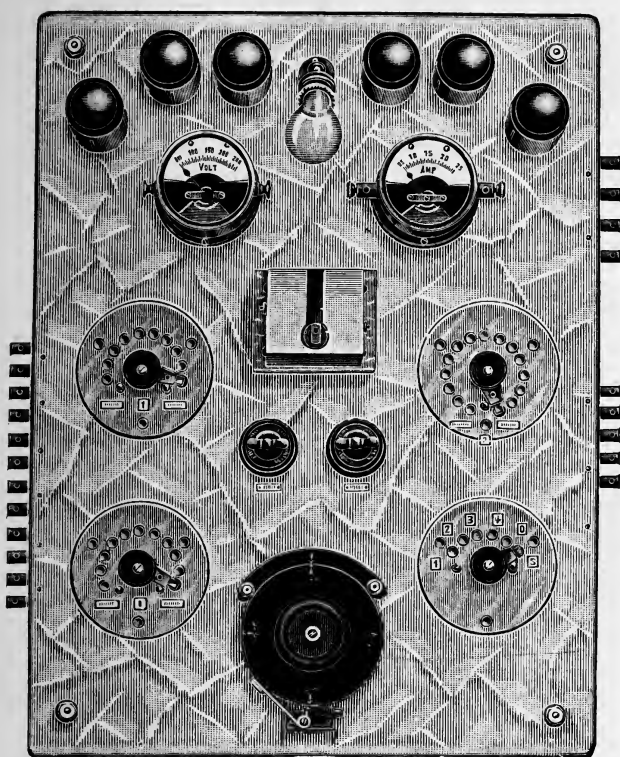


G/..5570-73

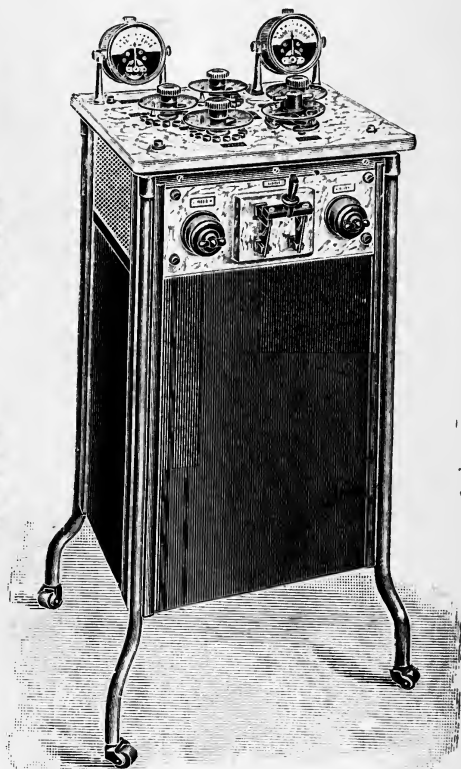
- |  |         |
|--|---------|
| <p>G/..5570    <b>Switchboard for Induction Coils</b> with single anode, Wehnelt or Caldwell<br/> <i>Code MACRI</i>    Interrupter for direct current, of from 65 to 125 volts, with ampere-<br/> meter .....</p>  | \$88.00 |
| <p>G/..5571    The same, for direct current of from 150 to 220 volts, with ampere-<br/> <i>Code MAPEL</i>    meter.....</p>  | 110.00  |
| <p>• G/..5572    <b>Switchboard for coils</b> with 3 or 4 anodes, Wehnelt or Caldwell In-<br/> <i>Code MAPPER</i>    terrupter, for a direct current of from 65 to 125 volts, with select-<br/> ing switch for the four different degrees of self-induction, with 1<br/> ampere-meter.....</p> | 115.00  |
| <p>G/..5573    Same as before, for direct current of from 150 to 220 volts.....<br/> <i>Code MAQUI</i></p>   | 137.50  |

*Modifications of these Switchboards are listed under Nos. 5589—93.*

## 4. Marble Switchboards, for the Alternate Use of the Coil with the Electrolytic and Mechanical Interrupter.



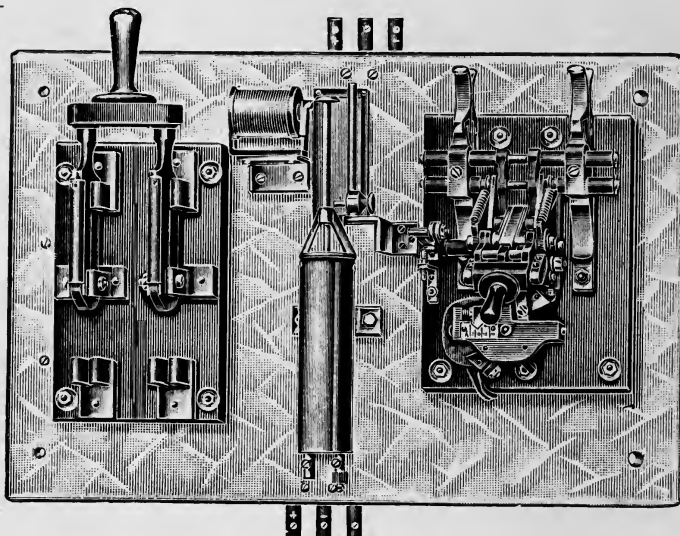
THE KNY-SCHEERER CO., N. Y.  
G/..5582



THE KNY-SCHEERER CO., N. Y.  
G/..5582 Mounted in Tableform.

- G/..5580 **Switchboard** for the alternate operation of the induction coil with electrolytic and mechanical interrupter, suitable for direct current of from 65 to 125 volts; provided with ampere meter ..... \$125.00  
*Code MARGU*
- G/..5581 The same, suitable for direct current of from 150 to 220 volts..... 145.00  
*Code MARID*
- G/..5582 **Switchboard** for the alternate operation of the induction coil with 3 or 4 anode electrolytic and mechanical interrupter; suitable for direct current or from 65 to 125 volts, and with selector for four different degrees of self-induction of the primary coil, with ampere-meter..... 150.00  
*Code MARKT*
- G/..5583 The same, suitable for direct current of from 150 to 220 volts..... 170.00  
*Code MARLO*

## 5. <sup>55</sup>Marble Switchboards for Instantaneous and Tele-Exposures.



G/..5585 combined with 5587 and 5586

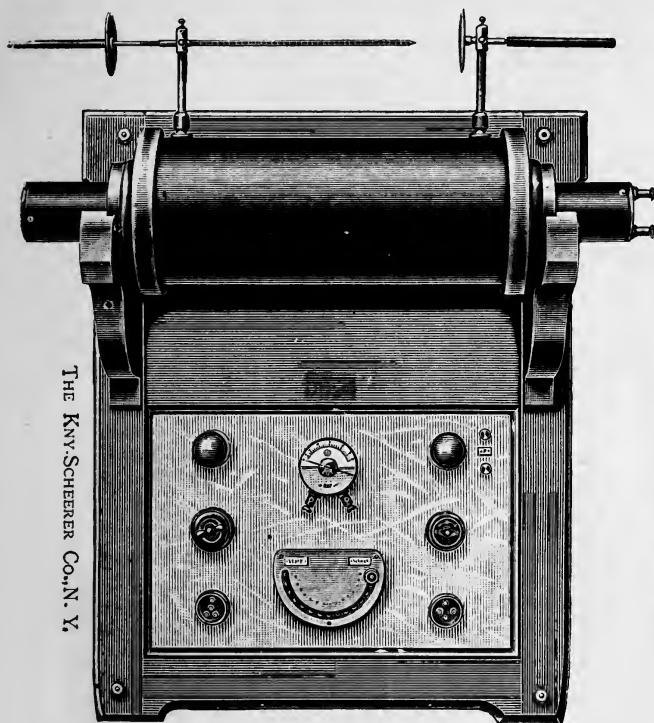
G/..5585	<b>Auxiliary Switchboards</b> , mounted with snap switch for intensities of <i>Code MARRY</i> 60 amperes, fuses and binding posts .....	\$60.00
G/..5586	The same, with selector switch, for three-phase installations .....	87.50
<i>Code MARRS</i>		
G/..5587	<b>Automatic Time Switch</b> , which can be set for various time intervals, <i>Code MARUL</i> mounted on one of these switchboards .....	40.00

### MODIFICATIONS OF THE SWITCHBOARDS.

G/..5589	<b>Separate Amperemeter for Rheostats</b> Nos. 5550 to 5553 .....	\$9.50
<i>Code MASIC</i>		
G/..5590	<b>Voltmeter mounted on Switchboards</b> Nos. 5560 to 5583.....	13.50
<i>Code MASKE</i>		
G/..5591	<b>Variable Shunt Rheostat</b> , for selecting primary potentials of from 25 volts <i>Code MASON</i> up to the full potential of the main line, 120 or 220 volts, respec- tively, including 1 voltmeter suitable for switchboards Nos. 5560 to 5562.....	40.00
G/..5592	The same for switchboards Nos. 5570 to 5573, including voltmeter.....	70.00
<i>Code MASSU</i>		
G/..5593	The same for switchboards Nos. 5580 to 5583, including voltmeter.....	62.00
<i>Code MASSEN</i>		

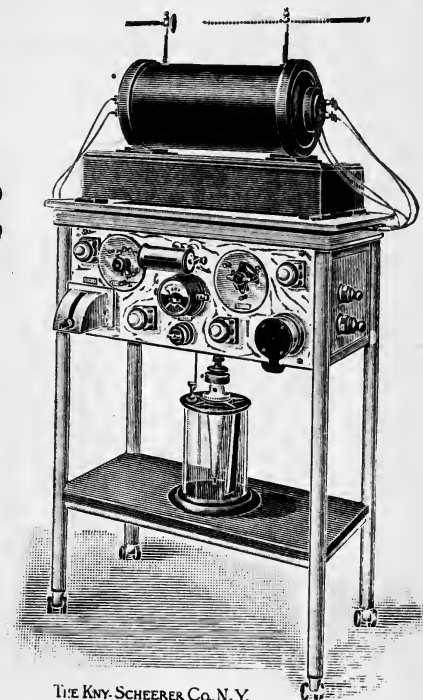
The object of these shunt rheostats is to adjust the primary voltage to the vacuum of the X-ray tube, thereby minimizing the intensity of the closing current. This device is highly recommended, as it permits of the economical operation of the tubes.

# X-RAY APPARATUS—Modifications of Regulating Devices.



THE KNY-SCHERER CO., N. Y.

G/..5600



THE KNY-SCHERER CO., N. Y.

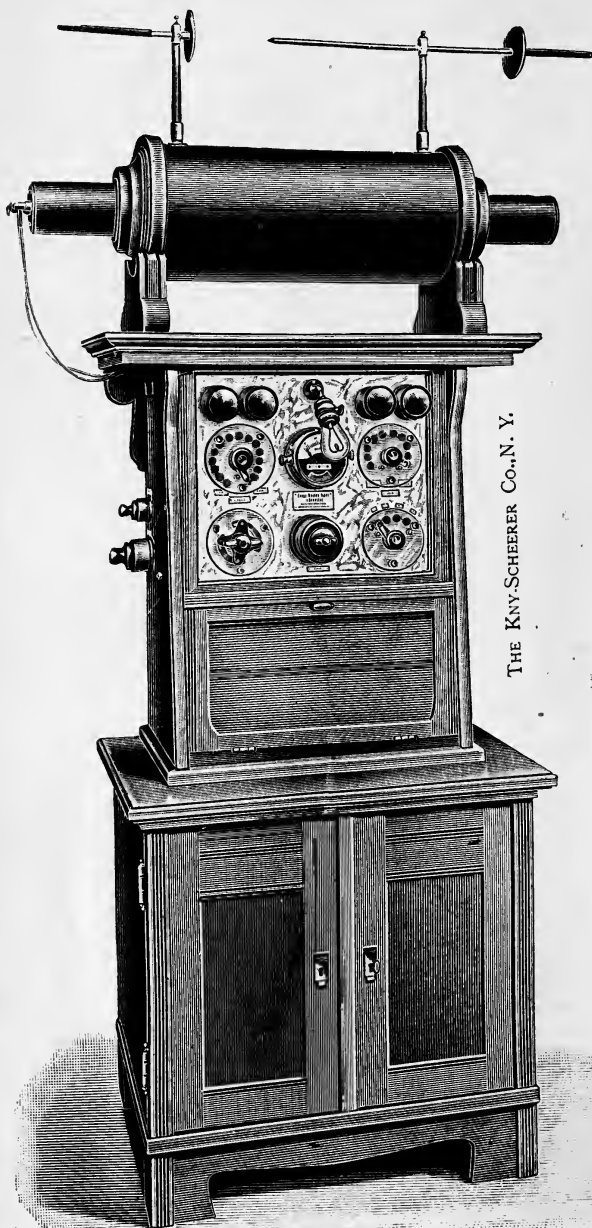
G/..5601

G/..5594	<b>Precision Volt or Amperemeter</b> , for instruments Nos. 5589 and 5590, <i>Code MAST</i> mounted on switchboards Nos. 5560 to 5583, increases price by.....	\$10.00
G/..5595	<b>Separate Shunt Resistance</b> for operating switchboards, Nos. 5560 to <i>Code MATAL</i> 5562, to 220 volts.....	40.00
G/..5596	The same for switchboards Nos. 5570 to 5572.....	70.00
<i>Code MATEN</i>		
G/..5597	The same for switchboards Nos. 5580 to 5583.....	80.00
<i>Code MATIZ</i>		
G/..5598	<b>Separate Shunt Resistance</b> for switchboards Nos. 5560 to 5562, to <i>Code MATRA</i> operate from the direct current of from 400 to 600 volts (for 2 x 220 volt installations or electric car systems*).....	90.00
G/..5599	The same for switchboards Nos. 5570 to 5583.....	180.00
<i>Code MATTE</i>		

In order to protect the operator from electric shocks, one line of the X-ray apparatus is grounded; the highest difference of potential is only 125 volts. (\*We do not recommend the installation of a rotary converter, owing to the fluctuations of the voltage in electric car systems).

G/..5600	<b>Frame for Switchboards</b> provided with bracket, both of polished oak for <i>Code MATUT</i> mounting of the induction coil to the wall. Suitable for coils up to 12" and used in connection with switchboards Nos. 5560 to 5571. Additional price .....	\$24.00
G/..5601	<b>Iron Table</b> , white enameled, provided with rollers and marble table plate <i>Code MATZE</i> for induction coil, switchboard mounted at the sides of the table, with a lower table plate for the interrupter; suitable for coils up to 16" and different kinds of switchboards. Extra price .....	72.00

THE KNY-SCHERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.



THE KNY-SCHEERER CO., N. Y.

G/..5602



THE KNY-SCHEERER CO., N. Y.

G/..5603

- G/..5602 **Cabinet** of the finest white oak, highly finished, for switchboards and  
*Code MAUBE* induction coils up to 20 inches spark length. Price, including mount-  
 ing of switchboard and auxiliary devices to cabinet ..... 90.00
- G/..5603 **Nickelplated Table** provided with rollers, the switchboard as table plate  
*Code MAUDI* and auxiliary devices mounted at the side ..... 55.00

*For flexible connecting cord see Nos. 5977*

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

## d. Sources of Electric Current.

### 1. Storage Batteries.

Catalogue No.	Code	Spark Length of Induction Coil	Cells	Amp. Hours	Discharge	Price
G/..5610	<i>MAWWE</i>	10-16 inch	8	40	5 Amperes	\$ 64 00
G/..5611	<i>MAXAG</i>	10-16 "	10	40	5 "	76 00
G/..5612	<i>MAXEN</i>	16-20 "	10	80	8 "	120 00
G/..5613	<i>MAXIL</i>	20-24 "	16	40	5 "	128 00
G/..5614	<i>MAXY</i>	24-28 "	16	80	8 "	160 00

For convenience in transportation, we subdivide the batteries into two or three sections according to their sizes.

G/..5618	<b>Lamp Resistance</b> for charging batteries of from 24-40 ampere-hours capacity.....	\$8.50
Code <i>MAZAG</i>		
G/..5619	The same, for apparatus up to 80 ampere-hours capacity .....	11.00
Code <i>MAZDE</i>		
G/..5620	<b>Precision Pocket Voltmeter</b> , for testing the cells individually, including case .....	10.00
Code <i>MAZEL</i>		

### 2. Isolated Power Plants.

In all instances, where a supply of electric energy from a central station is not obtainable, as in field service, or where portability of the X-ray apparatus is of importance, the installation of a separate plant, consisting of a gasoline or alcohol engine, coupled with a direct current generator is advisable.

G/..5621	<b>Gasoline Engine</b> of 2 H. P. directly connected with generator on iron base, of an output of 9/10 k.w., suitable for X-ray outfits with mechanical interrupter, complete, with field controller.....	\$565.00
Code <i>MECK</i>		
G/..5622	The same, of 4 H. P., with generator, of an output of 2½ k.w., for X-ray apparatus with electrolytic or mechanical interrupter, complete, with field controller.....	900.00
Code <i>MECOD</i>		

### 3. Motor-Generator Sets.

During the last few years progress has been made in the development of X-ray apparatus for the direct operation on the alternating current. The frequency of interruptions of such an equipment, however, is limited to a definite number, which is identical with the number of alternations of the current from the main. Where the economical and efficient "Rekord," or sliding contact interrupters are desired, also in all cases where a direct current X-ray apparatus is to be connected to the alternating current feeder, the installation of a motor generator will be required.

G/..5623	<b>Alternating Current Motor</b> of 2 H. P. directly coupled with direct current generator of 6 amperes at 110 volts, complete, with starting and field controlling rheostats.....	\$200.00
Code <i>MEDAB</i>		
G/..5624	<b>Alternating Current Motor</b> , of 4 H. P., connected with direct current generator of 22 amperes at 110 volts, complete, with starting and field controlling rheostats.....	300.00
Code <i>MEDIA</i>		

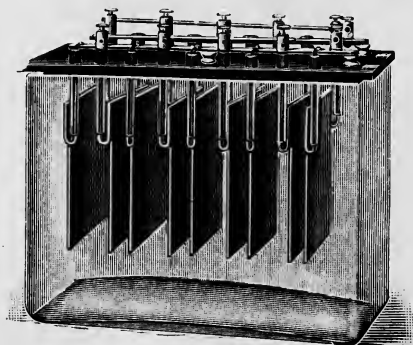
**4. Generators.**

G/..5625	Output 750 watts at 110 volts, complete, with field controller.....	\$110.00
Code MEDLE		
G/..5626	Output 2½ k.w. at 110 volts, complete, with field controller .....	220.00
Code MEDON		

*Above prices are subject to change without notice.*

*We are prepared to furnish itemized estimate covering all the expenses of such installations if desired.*

**Electrolytic Valve-Cells.**



THE KNY-SCHEERER CO., N. Y.

G/..5625

G/..5627	Valve Cell for suppressing one direction of the alternating current	
Code MESUD	wave, suitable for alternating current installations; price, including glass jar .....	\$15.00

**e. X-Ray Tubes and Accessories.**

The three essential parts of an X-ray equipment are the coil, the interrupter, and the tube. Eminent specialists consider the quality of the latter as the factor of prime importance for successful X-ray work. The results and the economy of an X-ray laboratory depend materially on this item, as the contrast of the pictures, their diagnostic value and useful life of the X-ray tube are in closest relation to the degree of perfection and the skillful use of the apparatus.

As will be seen from the list following, we are confining our stock to a strictly STANDARD LINE of X-ray Tubes, manufactured by experienced and reliable makers in this country and in Europe, products which have stood the test of time and can be recommended.

Every X-ray tube is thoroughly tested before leaving our hands and is accompanied by a certificate. Special care is given to skillful packing so as to insure safe arrival, but our responsibility ceases when the package is accepted by the transportation company.

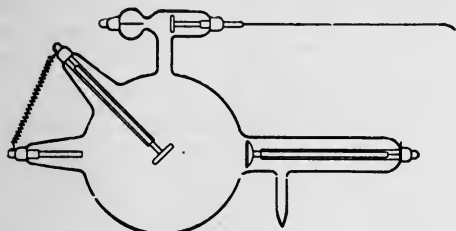
Insurance against breakage may be effected at a premium of ten per cent. ad valorem, which will be added to charge on invoice.

No tubes will be shipped insured, unless this is particularly stated in the order.

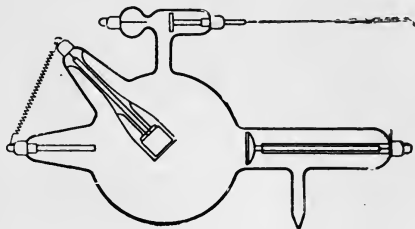
# X-RAY APPARATUS—X-Ray Tubes.

## X-ray Tubes for Induction Coils,

provided with mechanical interrupters, suitable for radioscopy and radiography, especially recommended for therapeutic treatment; provided with vacuum regulator:—



G/..5732-35



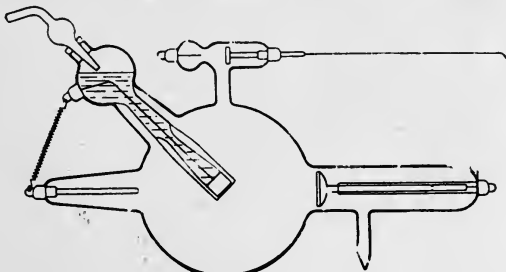
G/..5736-37

G/..5732 for a spark length up to 10 inches, bulb diameter 5¼ inches.....	\$12.00
Code MIKAD	
G/..5733 for a spark length up to 14 inches, bulb diameter 5¼ inches.....	13.50
Code MIKI	
G/..5734 for a spark length up to 20 inches, bulb diameter 6¼ inches.....	15.00
Code MIKNE	
G/..5735 for a spark length up to 24 inches, extra strong, bulb diameter 6¼ in.	18.00
Code MIKPA	

## Müller's X-ray Tubes for High Intensities,

to be used in connection with sliding contact, "Rekord" or electrolytic interrupter, suitable for radioscopy, radiography and therapeutical treatment, with coils of any spark length, with osmo and automatic vacuum regulator with reinforced glass mantle anticathode, to avoid sudden change of the vacuum:—

G/..5736 with a bulb diameter of 6¼ inches.....	\$25.00
Code MILAG	
G/..5737 with a bulb diameter of 8 inches.....	30.00
Code MILEN	



G/..5738/40

## Müller's Water-cooled Tubes,

for high intensities, with double osmo and automatic vacuum regulation. The platinum cup forming the anticathode is directly in touch with the water. These tubes are suitable for all work, except for instantaneous and tele-exposures.

G/..5738 Tube diameter of bulb 6¾".....	\$45.00
Code MILIT	
G/..5739 " " " 8" .....	55.00
Code MILLE	
G/..5740 " " " 10" .....	90.00
Code MILON	

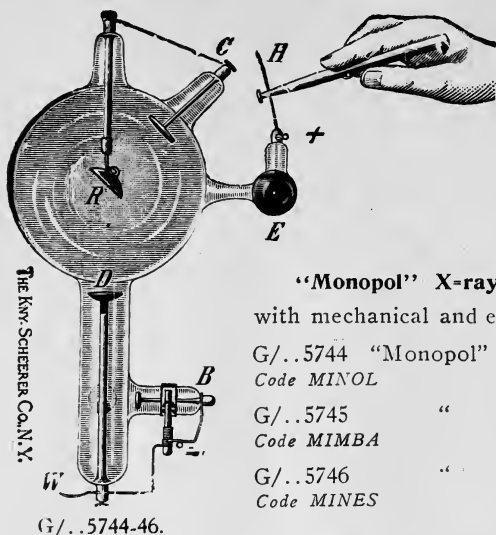
Owing to the frequent fluctuations of the value of platinum metal, the list prices of the water-cooled tubes are subject to change without further notice.

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

# X-RAY APPARATUS—Monopole X-Ray Tubes.

## 4. "Monopol" X-ray Tubes.

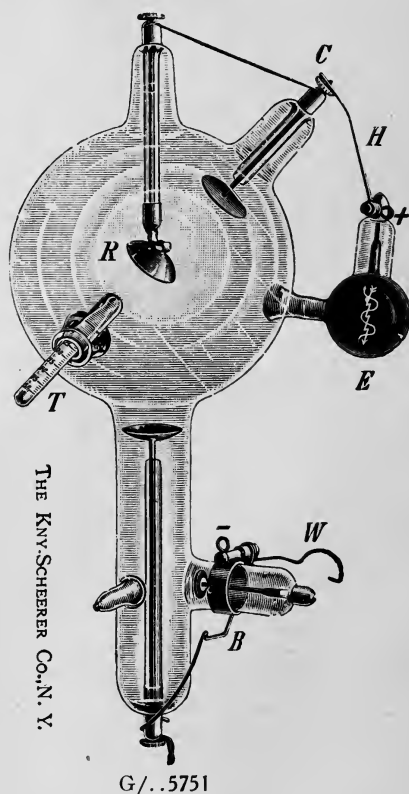
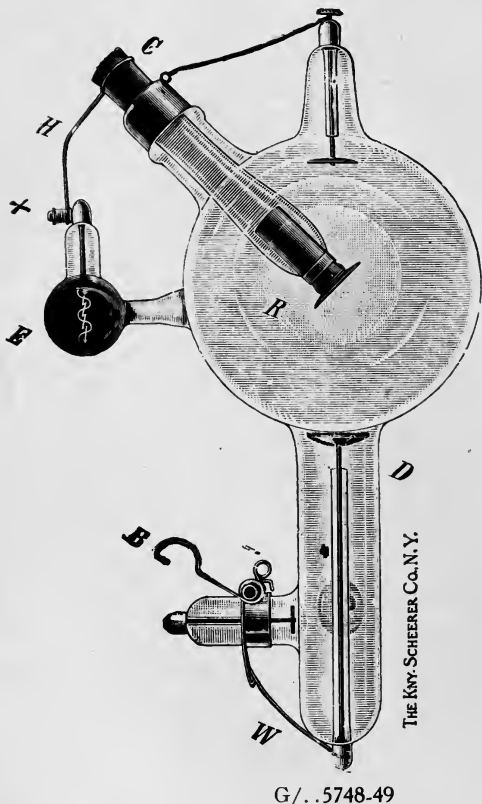
The "Monopol" X-ray Tubes offer the widest range of application and are, in regard to regulation, the most perfect tubes, as they allow varying of the vacuum during operation by adjusting with an insulated rod the spring contacts attached to the anode and cathode.



"Monopol" X-ray Tube, suitable for all sizes of induction coils with mechanical and electrolytic interrupters.

G/..5744	"Monopol" X-ray Tube, diameter of bulb 6"	.....	\$24.00
Code MINOL			
G/..5745	" " " " " 7"	....	30.00
Code MIMBA			
G/..5746	" " " " " 8"	....	35.00
Code MINES			

## 5. Water-cooled "Monopol" Tubes.



G/..5748	"Monopol" X-ray Tube, diameter of bulb 6 3/4"	.....	\$45.00
Code MIMUG			
G/..5749	" " " " " 8"	.....	55.00
Code MINAD			

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

## 6. "Monopol" Tube for Therapeutic Treatment, provided with device for Measuring and Regulating the Dosage.

This tube is specially designed for the treatment with X-radiance, although it may be used for radioscopic copy and radiography if required.

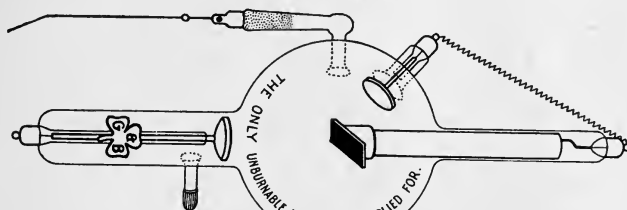
For regulating the dosage of an X-ray treatment, a thermometer indicating the temperature of the anticathode is supplied; and placed into a special receptacle at the side of the main bulb. In this manner a comparison with the standard table compiled by the author of this method is possible. The proper time of application is thereby controlled in accordance with the reading of the thermometer.

G/..5750 "Monopol" Therapeutic Treatment Tube, diameter of bulb 7" ..... \$30.00  
Code MINER

We furnish special holders for "Monopol" tubes, and in ordering stands and diaphragms, please inform us whether a holder for this tube is desired.

## 7. X-ray Tubes for Induction Coils with Extra Heavy Target.

Green and Bauer.

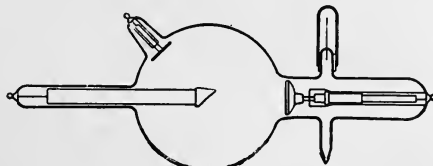


G/..5751-54

G/..5751	G. and B. X-ray tube, diameter of bulb 5" .....	Net,	\$15.00
Code MIERE			
G/..5752	" " " " " 6" .....	"	20.00
Code MIETH			
G/..5753	" " " " " 7" .....	"	25.00
Code MIGAI			
G/..5754	" " " " " 8" .....	"	30.00
Code MIGDA			

## 8. X-ray Tubes, with Heavy Anticathode and Osmo-vacuum Regulation.

Gundelach Type.



G/..5752-57

This heavy anticathode tube gives excellent results with induction coils for small and highest intensity of discharge. The vacuum is regulated by the osmosis method, a palladium wire when heated over an alcohol lamp becomes porous to such an extent that it allows a small quantity of gases to pass into the tube.

G/..5755	X-ray Tube, Gundelach, diameter 5" .....	\$17.00
Code MIELU		
G/..5756	" " " " 5½" .....	19.00
Code MIEXE		
G/..5757	" " " " 6" .....	21.50
Code MIRAB		
G/..5758	" " " " 6½" .....	25.50
Code MIRIF		

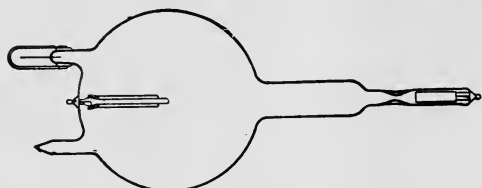
THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

# X-RAY APPARATUS—Valve Tubes.

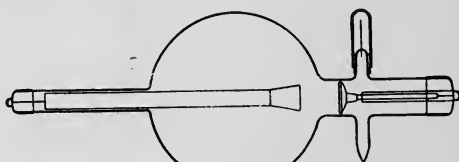
## 9. Special X-ray Tubes.

G/..5759 <b>Special X-ray Tube</b> , Gundelach, with extra heavy anticathode, for in-	
Code <i>MIME</i> stantaneous and tele-exposures.....	\$30.00
G/..5760 <b>X-ray Tube with Double Anticathode</b> , for comparative pictures of the	
Code <i>MINOR</i> apex of the lungs and of other parts of the body .....	60.00

### Means for Suppressing the Passage of the Current in an X-ray Tube in the Cathode-Anode Direction.



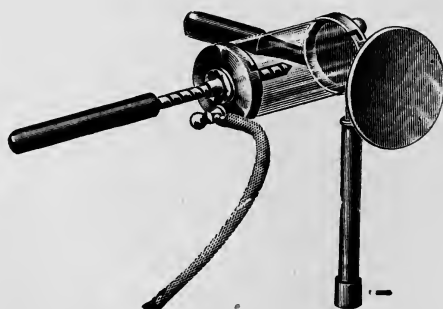
G/..5722



G/..5764

To avoid the destructive effect caused by the passage of a current in the direction from the cathode to the anode of an X-ray tube, various devices such as spark gaps, valve tubes, etc., have been designed. The valve tubes suppress the undesirable current in a very efficient manner; their vacuum, however, is not constant, and their useful life is comparatively short. The action of the spark gap as a valve is not so perfect as that of the tube, but remains absolutely constant. Where mechanical interrupters are used, the spark gap is sufficient; for electrolytic interrupters, however, the valve tube gives better results and for the direct connection of induction coils to the alternating current circuit a high potential valve tube is required.

G/..5762 <b>Valve Tube</b> , of 7-inch bulb diameter.....	\$10.00
Code <i>MIRES</i>	
G/..5764 <b>High Potential Valve Tube</b> ,.....	16.50
Code <i>MIRZA</i>	
G/..5766 <b>Holder for Valve Tubes</b> Nos. 5762 and 5764, which can be attached to one	
Code <i>MISAL</i> of the pillars forming part of the spark gap of the induction coil ....	1.00
G/..5767 The same for fastening to the wall.....	3.00
Code <i>MISBE</i>	



G/..5770



G/..5770 <b>Adjustable Spark Gap</b> , with glass muffer to suppress the noise from	
Code <i>MISIL</i> the discharge, to be attached to the negative pole of the induction	
coil.....	\$5.25
G/..5771 The same for mounting upon X-ray booth or near a coil placed on a	
Code <i>MISHI</i> high cabinet, etc., with adjustment by means of a cord and gra-	
duated scale .....	32.00

G/..5771

**f. Tubeholders and Tube Stands.**



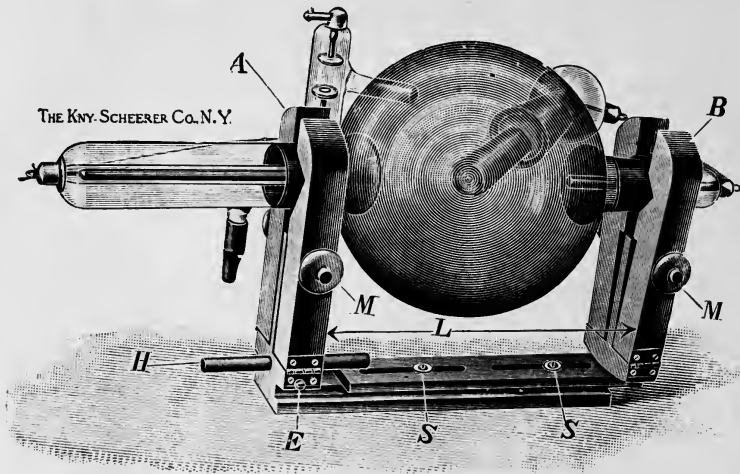
G/..5780



G/..5783

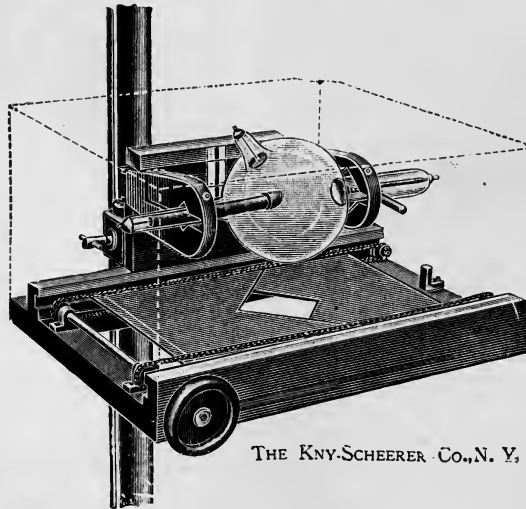
- G/..5780 **Floor Stand**, iron pedestal and wood upright, with adjustable cross  
*Code MITKE* arm and tubeholder ..... Net, \$12.00
- G/..5782 **Floor Stand**, entirely of metal, with extra heavy pedestal, suitable for  
*Code MITKU* large, heavy tubes and lead glass shields, etc. (see illustration G/5805) 30.00
- G/..5783 **Floor Stand for Stereoscopic and Regular Exposures**, with graduated  
*Code MITLA* crossbar for measuring the lateral displacement of the tube ..... 20.00
- G/..5784 The same entirely of metal, with extra heavy pedestal, suitable for large,  
*Code MITON* heavy tubes (see illustration G/5805) and lead glass shields, etc.... 30.00

**SELF-CENTERING TUBEHOLDER.**



G./5785

With the more exacting requirements of X-ray technique the old styles of tubeholders became inadequate. To afford greater convenience and rapidity in the manipulation of the tubes we have placed a new design on the market which allows of ready and accurate centering of the tubes in all of our auxiliary apparatus, such as orthodiagraphs, diaphragms, treatment tables, etc.

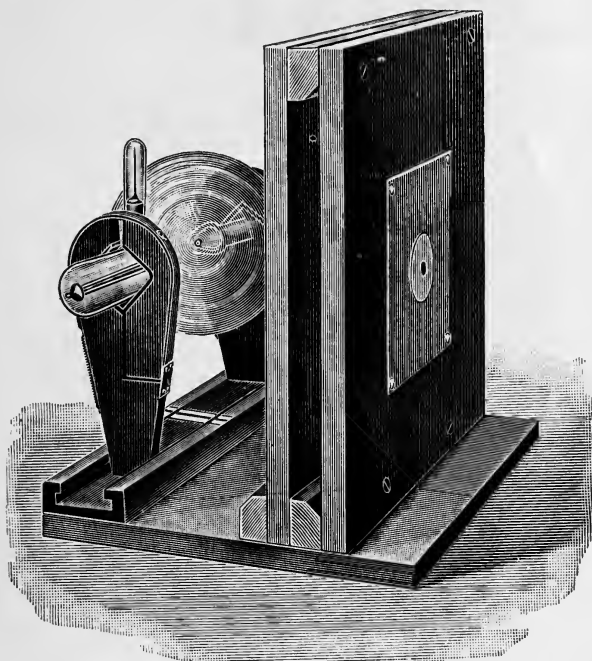


G/. 5786

Our new self-centering tubeholder consists of two clamps which can be readily adjusted and contain such openings as to hold most styles of tubes firmly. The idea is to provide one of these inexpensive tubeholders for each tube.

Once centered the tube is kept permanently in the holder and can then be placed at a moment's notice in any of our examining apparatus.

We recommend our tube racks, listed on No. G/5969-61 for convenient and safe keeping of the tubes. The application of this holder is illustrated under G5786, which represents an adjustable slit-diaphragm mounted on a stand. The base board of the holder is slid into the guide bar attached to the frame of the diaphragm, the position of guide bar and holder are made to correspond, and the anticathode of the tube is centered to correspond to the aperture in the diaphragm. All our new apparatus for diaphragm exposure and examination are provided with these guide bars; on others they can be attached without difficulty.

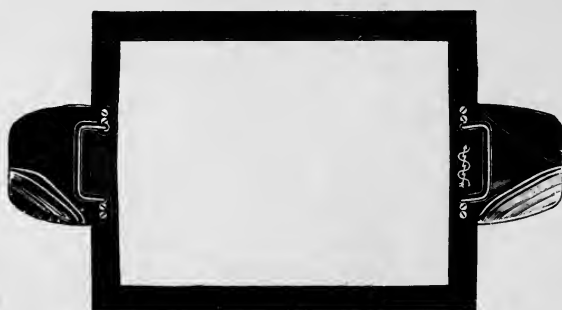


G/..5787

For large X-ray laboratories we recommend a special centering device, G5787, which enables the operator to adjust the tubes more quickly and accurately than if this were done on the apparatus itself.

C/..5785	<b>Self-centering Tubeholder</b> consisting of U-shaped frame with double	
Code MITRY	clamp, suitable for most of the tubes .....	\$2.00
G/..5786	<b>Guide Bar</b> with screw for fastening the tubeholder to an examining ap-	
Code MITWE	paratus not provided with the device .....	1.50
G/..5787	<b>Centering Device</b> with small fluorescent screens .....	12.00
Code MITYL		

## g. Fluorescent Screens.



G/5795-99



G/5788-89

We have given special attention to the development of the manufacture of these screens and have succeeded in producing an article of the finest brilliancy. Several coats of barium-platino-cyanide are applied in such a manner that the crystals cannot be affected by dust or other impurities. For the protection of the operator we suggest the use of lead glass over the screen in all cases where a great amount of radioscopic work is done. For the examination of the heart, lungs, stomach and intestines a round screen is preferable, as the amount of usefull light is greater than with one of a rectangular shape, and the blinding from side light materially reduced.

G/..5788 <b>Barium Platino-cyanide Screen</b> mounted upon round frame, inside diameter 6 inch, first-class quality .....		\$12.00
Code <i>MITZA</i>		
G/..5789 The same, 8 inch .....		\$20.00
Code <i>MIXIL</i>		
G/..5795 The same on wooden frame		
Code <i>MOCAD</i> 5 x 7 inches .....		10.00
G/..5796 The same 7 x 9½ inches ....		18.00
Code <i>MOCHI</i>		
G/..5797 The same 9½ x 12 inches ...		28.50
Code <i>MOCCA</i>		
G/..5798 The same 12 x 16 inches ....		45.00
Code <i>MOCEN</i>		
G/..5799 The same 16 x 20 inches ....		75.00
Code <i>MOCUY</i>		

**Fluoroscope or Kryptoscope**, with detachable fluorescent Barium-Platino-Cyanide Screen. Wooden Casing lined with black canvas.

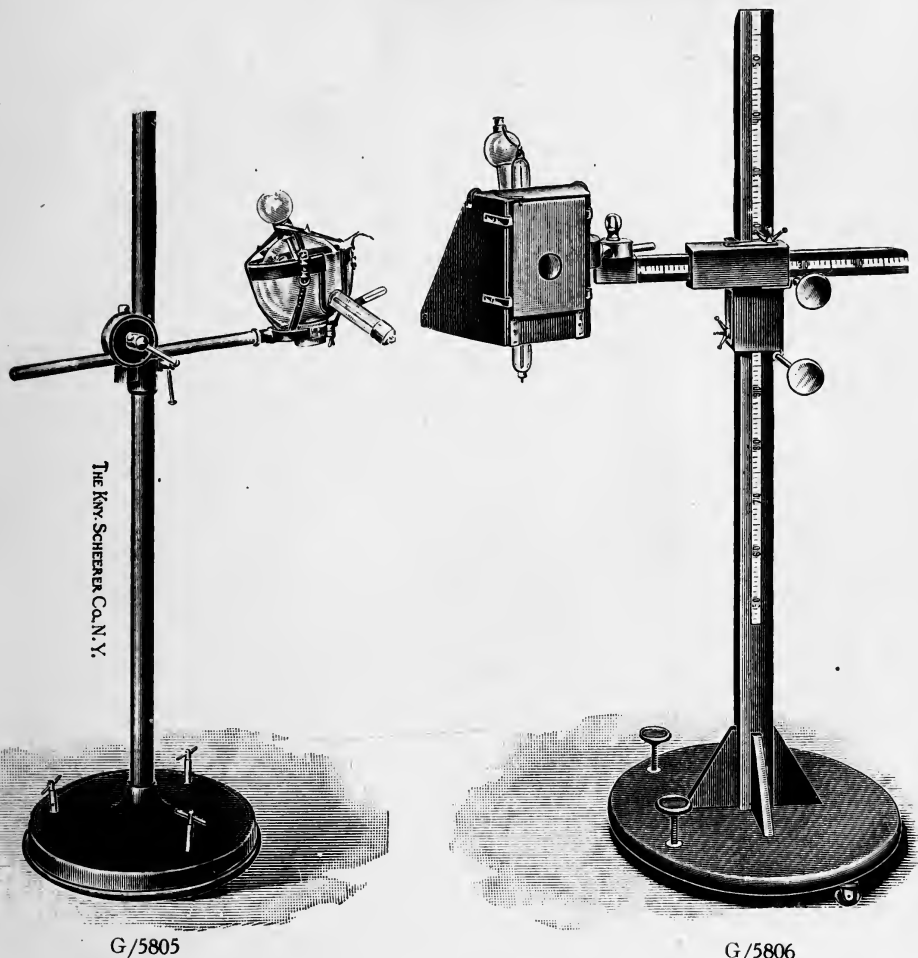
G/..5795a	Size 5 x 7 inches screen.....	\$12.50
Code <i>AMOCAD</i>		
G/..5796a	" 7 x 9½ " " .....	20.50
Code <i>AMOCHI</i>		
G/..5797a	" 9½ x 12 " " .....	32.00
Code <i>AMOCCA</i>		

*NOTE: On account of the fluctuations of the platinum prices our quotations of fluorescent screens are subject to alterations without further notice.*

### Modifications of the Flourescent Screens.

G/..5801 Code <i>MODDE</i>	a. <b>Interchangeable Plate of Transparent Celluloid</b> with frame as plateholder, for drawing purposes:	Inch.	5 x 7	7 x 9½	9½ x 12	12 x 16	16 x 20	
			\$2.25	\$2.25	\$2.75	\$3.00	\$4.50	
G/..5802 Code <i>MODEL</i>	b. <b>Lead Glass Plate</b> for the protection of the operator's face:	Inch.	5 x 7	7 x 9½	9½ x 12	12 x 16	16 x 20	
			\$1.00	\$1.75	\$2.75	\$4.75	\$6.50	
G/..5803 Code <i>MODHA</i>	c. <b>Handle with Metal Shield</b> for the protection of the operator's hand, per pair .....							\$1.75
G/..5804 Code <i>MODIF</i>	d. <b>Suspending Arrangement for the Screen</b> , consisting of a metal frame, provided with bearings for the pinions attached to the frame of the screen, whereby the latter can be swung around a horizontal axis. Three pairs of pulleys are to be fastened to the ceiling as guides for the cord-carrying screen and counterweight; complete with 45 feet of cord .....							9.00

## h. Diaphragm Apparatus, Treatment, Skiagraphice and Examining Tables.



### 1. Diaphragm Apparatus.

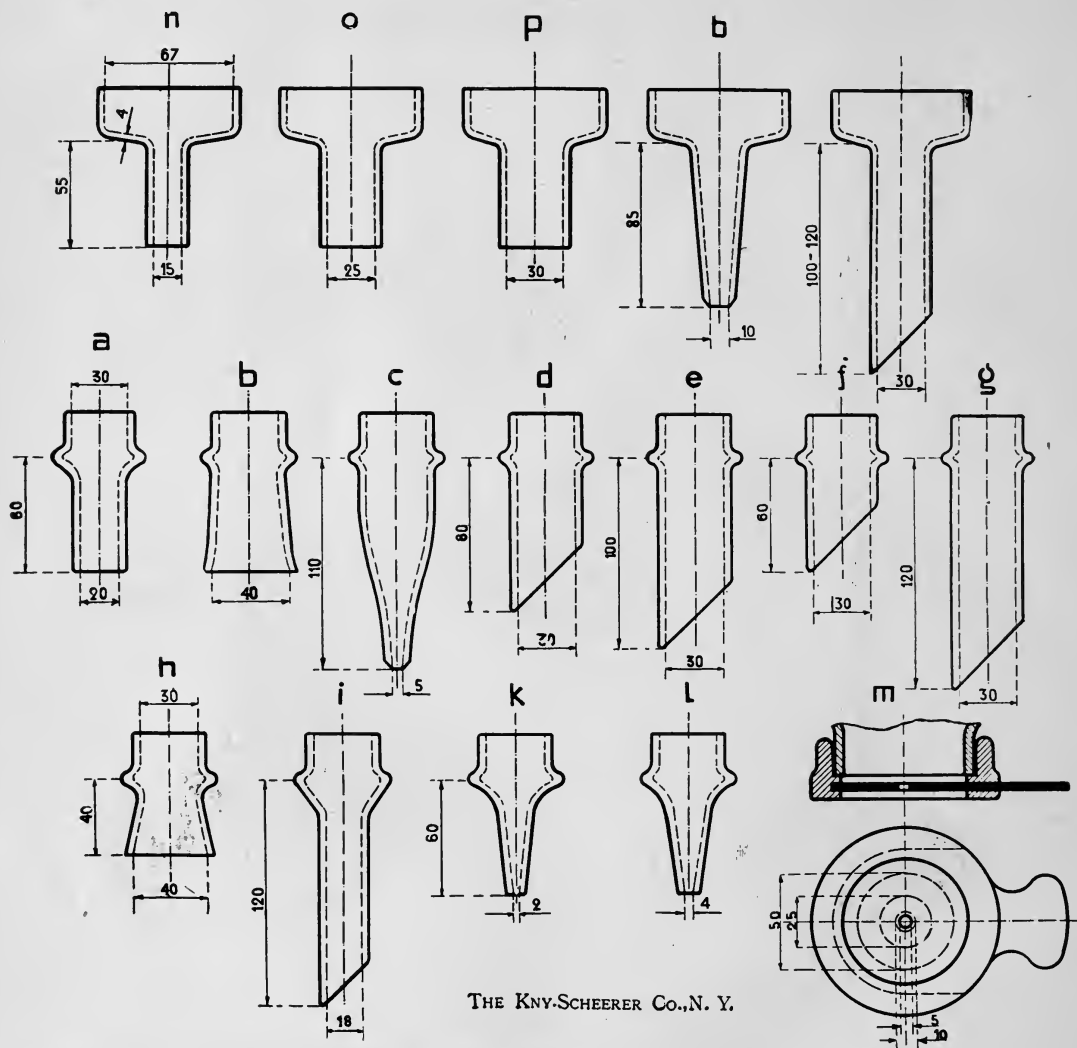
- G/..5805 **Floor Stand for Radiotherapy**, with lead glass diaphragm of semi-ball shape, mounted onto a cross bar, with swivel attachment six interchangeable lead glass specular are furnished for X-ray tubes of  
*Code MOEBE*
- a.* up to 5½ in. bulb \$51.00    *b.* up to 6½ in. bulb \$53.50    *c.* up to 8 in. bulb \$56.00
- G/..5805 **Lead Glass Shield**, without stand, but fittings and crossbar, for use in  
*Code MOENE* connection with stands No. 5782 and 5784, suitable for X-ray tubes of  
*f.* up to 5½ in. bulb \$26.00    *g.* up to 6½ in. bulb \$28.50    *h.* up to 8 in. bulb 31.00
- These prices include six interchangeable lead glass treatment specula of different diameters.
- G/..5806 **Diaphragm Stand** for Radioscopy, Radiography and Therapy, provided with  
*Code LAMBERT* graduation for taking stereoscopic pictures. It affords protection against the X-rays, and can also be used for compression ..... \$50.00
- G/..5806a **Iris Diaphragm** for G/..5806, for apertures of from 2 to 10 cm. .... 10.00
- G/..5806b **Cylinder Diaphragm** for G/5806. .... 4.00
- G/..5806c **Plate** for G/5806, suitable for holding treatment tubes, No. .... 1.00

We recommend the use of a soft rubber sleeve over the cathode end of the tube to close entirely the corresponding intersection in the diaphragm, price each ..... 2.00

# X-RAY APPARATUS—Lead Glass Specular.

G/.5807 **Lead Glass Specula** attachable to treatment slide on protective stands.

Code MOOPE G 5908, 5810, 5811, each ..... \$2.75



Tube	Application	Diameter of tube inches	Length of tube inches	Shape of Treatment end
a.	For a small diseased area on the skin.....	$\frac{3}{4}$	$2\frac{1}{4}$	straight
b.	do. do. do. ....	$1\frac{1}{2}$	$2\frac{1}{4}$	do.
c.	For a diseased area in the cavities of the nose and ear.....	2	$4\frac{1}{4}$	do.
d.	do. do. in the cavity of the mouth...	$1\frac{1}{4}$	$3\frac{1}{8}$	oblique
e.	do. do. in the throat.....	$1\frac{1}{4}$	4	do.
f.	do. do. in the vagina.....	$1\frac{1}{4}$	$2\frac{1}{4}$	do.
g.	do. do. in the portio vaginalis uteri..	$1\frac{1}{4}$	$4\frac{3}{4}$	do.
h.	do. do. in the introitus vaginae .....	$1\frac{1}{2}$	$1\frac{1}{2}$	straight
i.	do. do. in the rectum.....	$\frac{3}{4}$	$4\frac{1}{4}$	oblique
k.	do. do. in the prostate.....	1	$2\frac{1}{4}$	straight
l.	do. do. fistula and intra-tumor treatment.....	$1\frac{1}{2}$	$2\frac{1}{4}$	do.

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

## X-RAY APPARATUS—Diaphragm Stand for Therapy.

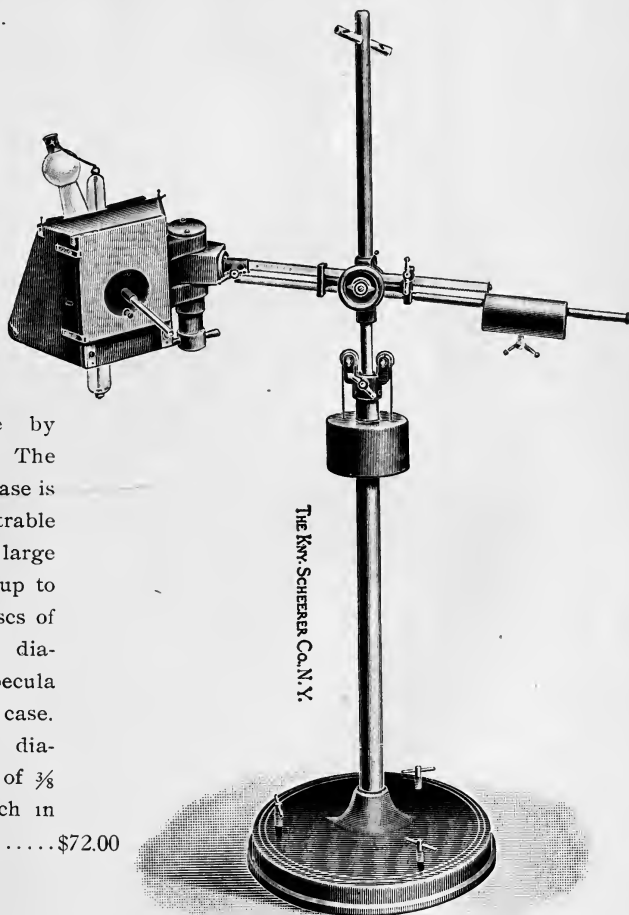
G/..5808 **Rubber Cover**, made of rubber, lead oxide, impenetrable to the X-rays, *Code MOESK* serving to shield off the undesirable rays, and provided with a circular opening of 3 inches in diameter for the passage of the active rays; furnished with two insertions of  $1\frac{1}{2}$  and  $2\frac{1}{2}$ " in diameter:

a. for tubes of 6 in. bulb diameter .....	\$10.00
b. for tubes of $6\frac{1}{4}$ in. bulb diameter .....	11.25
c. for tubes of $6\frac{3}{4}$ in. bulb diameter .....	12.50

This style of rubber masks is not suitable for larger tubes.

### DIAPHRAGM STANDS.

G/..5809 **Diaphragm Stand for**  
*Code MOFAD* **Radiotherapy** with metal base mounted on casters, hollow vertical column with pulleys carrying the vertical stand with cross-arm, diaphragm, tube, etc., and the proper counterweight to insure easy adjustment. The cross-arm itself is also balanced and conveniently adjustable by means of rack and pinion. The inside of the diaphragm case is lined with an impenetrable rubber composition and is large enough for X-ray tubes up to 8 inches. Diaphragm discs of different apertures, iris diaphragm and lead glass specula can be used with this case. Price including sliding diaphragms with apertures of  $\frac{3}{8}$  inch,  $\frac{3}{4}$  inch and  $1\frac{1}{4}$  inch in diameter .....\$72.00



G/..5809

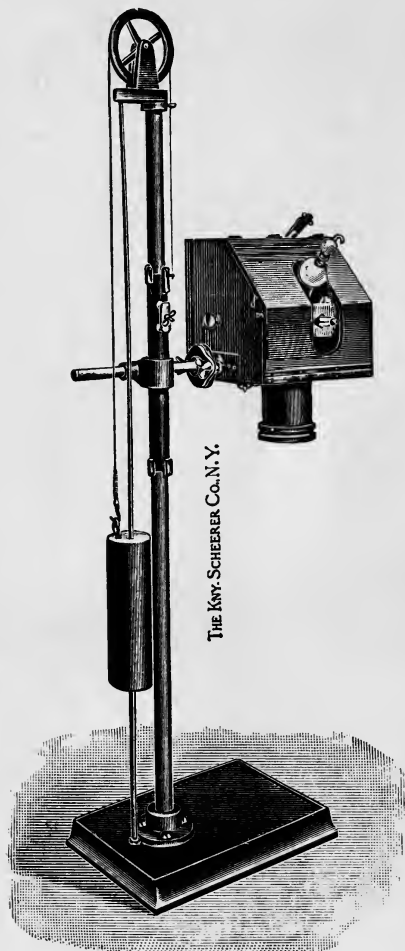
### Modification of this Apparatus.

a. Additional Price for Iris Diaphragm .....	\$13.50
b. Lead Glass Tubes, as listed under G..5807, a—1, or of other forms, each.....	2.75
c. Sliding Diaphragms of lead sheet metal, with apertures of any size and shape, each	1.00

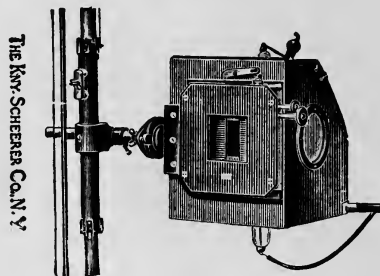
---

THE KNY-SCHERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

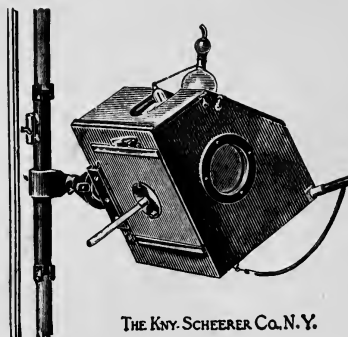
UNIVERSAL DIAPHRAGM STAND.



G/..5810-A. Universal Diaphragm Stand with Compression Cylinder for Radiography.



G/..5810-B. In vertical position with Adjustable Diaphragm for Fluoroscopy.



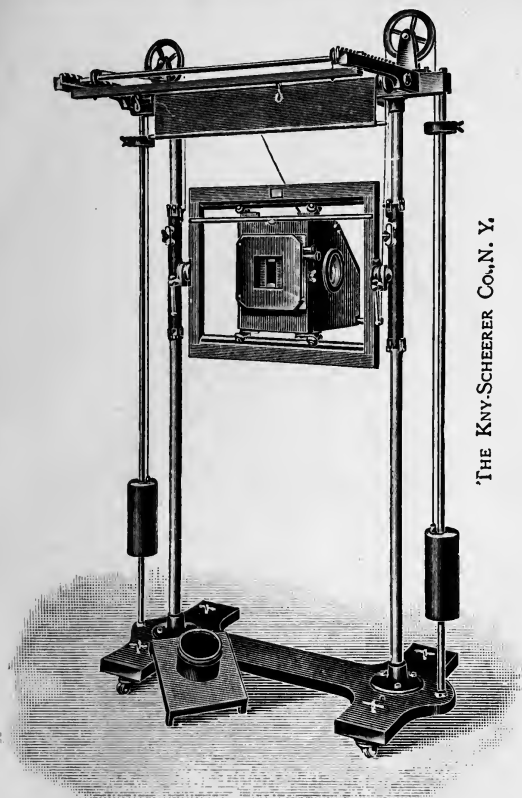
G/..5810-C. Showing Treatment Specula for Radiotherapy.

**G/..5810 Universal Diaphragm for Radiotherapy, Radioscopy and Radiography**

*Code MOFFU*

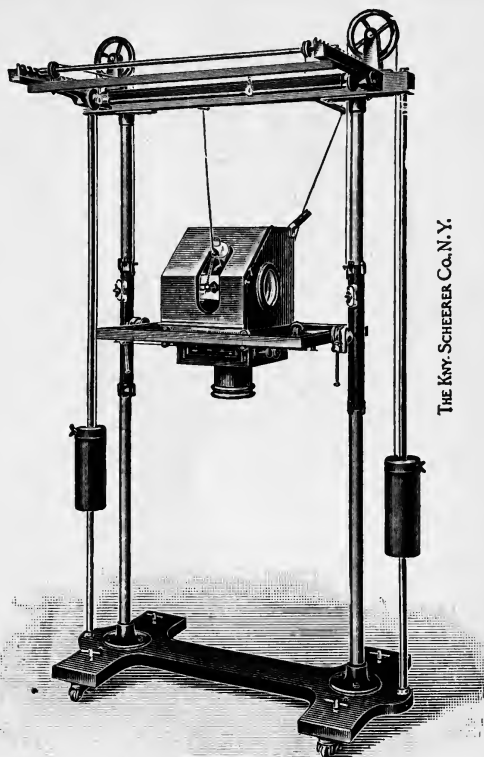
consisting of metal base mounted on casters, with steel column, serving as guide for raising and lowering attachment of the protective box. The case enclosing the X-ray tube is lined with a rubber lead oxide material to protect the operator entirely from the X-radiance. A lead glass window is furthermore provided for the operator to observe the proper working of the X-ray tube. The front of the box is provided with slide rails and clamping attachment which permits the interchange of compression cylinder, adjustable diaphragm or treatment shield. Price of the above complete with one self-centering tube holder, compression cylinder, adjustable diaphragm and treatment hood with one lead glass specula .....

\$125.00



THE KNY-SCHEERER CO., N. Y.

G/.5811-



THE KNY-SCHEERER CO., N. Y.

G/.5811-

G/.5811  
Code MOFIU

**Diaphragm Stand for Radioscopy, Radiography and Radiotherapy**, consisting of a metal framework with base mounted on casters. A second frame with bearings rolling along the vertical columns of the outer frame, carries the protective case with diaphragm, tubeholder, etc., and is provided with two guide bars for a horizontal displacement of the case. The smaller frame may be swung into any place between the horizontal and vertical. The stand is high enough to permit of the radioscopy examination of the whole body in an upright position, and its width is such that it can be rolled over any examining table. A curtain of black cloth serves to shield off the undesirable light during the examination with the screen; for convenient manipulation, the latter can be suspended and balanced, for which two special pulleys are provided, attached to a bar which can be fixed into notches in order to use the screen at different distances from the tube. Price, including diaphragm case with tubeholder....

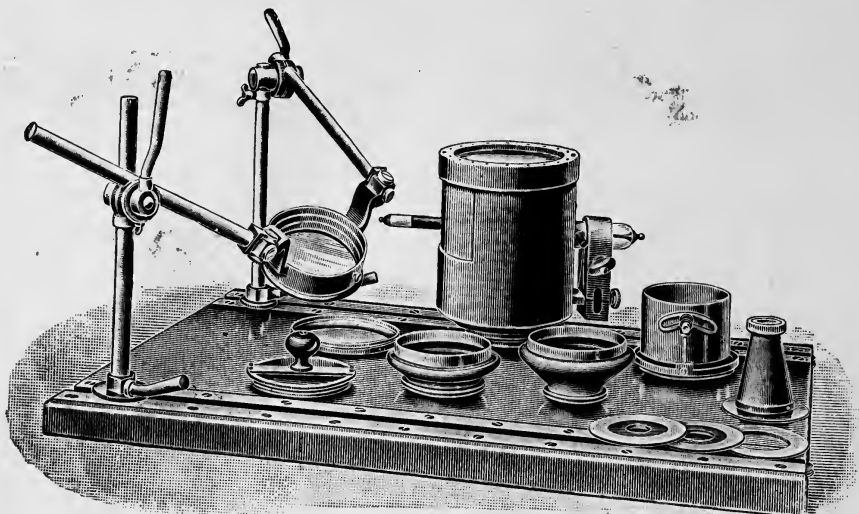
\$200.00

This diaphragm stand is provided with a shutter, whose slit can be adjusted by means of two right-angle sheet metal pieces in such a way as to produce openings of any width in the horizontal or vertical directions. It is further supplied with a cylindrical compression diaphragm of an aperture of 5 inches, and a base plate for holding the lead glass specula for radio-therapeutic purposes, listed and illustrated under G 5807. All adjustable parts are provided with ball bearings or slide over small pulleys and permit of a convenient and sensitive adjustment. Every movement is independent and provided with a separate device for fixing.

## Modifications of the Diaphragm Stands G/5810 and G/.5811.

- |  |   |
|--|---|
| <p>a. Pneumatic Cushion for the compression diaphragm with hand rubber bellows.<br/>This cushion grasps the skin of the patient firmly, without giving pain .....</p> <p>c. Attachment for Stereoscopic exposures, consisting of two slide rules with scale..</p> <p>e. Lead Glass Tubes of various shapes and diameters, G5807, a to 1.....</p> | <p>\$10.00</p> <p>24.00</p> <p>2.75</p> |
|--|---|

**THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.**



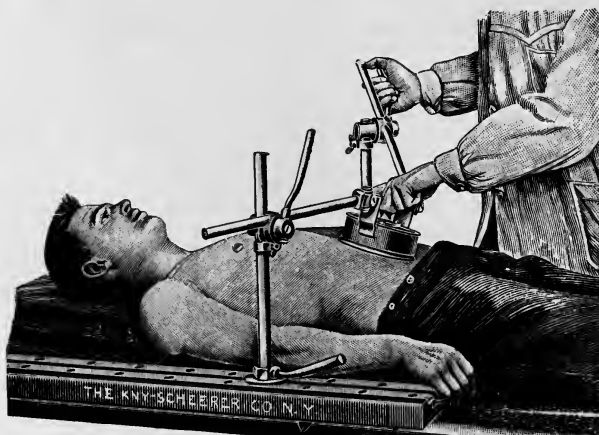
THE KNY-SCHEERER CO., N. Y.

G/. .5812

G/. .5812 **Compression Diaphragm**, consisting of a heavy wooden base, containing  
*Code MOFLE* 2 grooves, as receptacles for the metal stands. The lower ends of these stands form a clamp which can be tightened by means of a lever. Each of these stands carries a universal joint, which also forms the bearing for one of the cross-arms holding the compression diaphragm.

These cross-bars are brought to a rigid position by tightening the levers on the universal joints. The diaphragm has an aperture of  $5\frac{1}{2}$  inches diameter and is supplied with a cylinder which can be fixed into a vertical position independently of the diaphragm tube. The latter is provided with a parchment disk for the compression of the softer parts of the body, so as to avoid their bulging into the cylinder. It is supplied with two conical adapters of 4" and  $2\frac{1}{2}$ " aperture respectively, with diaphragms of lead, and a compression handle. Price complete with tubeholder and protecting case . . . . .

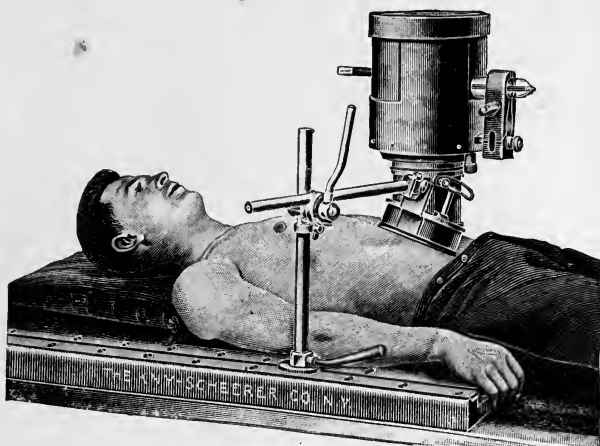
\$125.00



G/. .5812

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

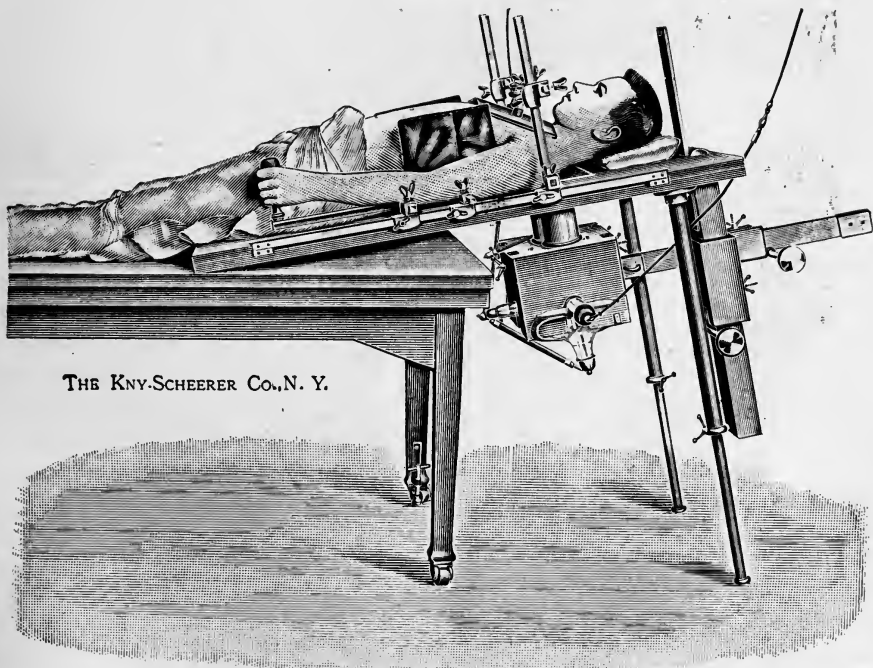
# X-RAY APPARATUS—Groedels Double Diaphragm.



G/.5812

G/.5785 **Reserve Tubeholders**, as described under Self-Centering Tubeholders,  
 Code MOGAN G5785 .....

\$2.75



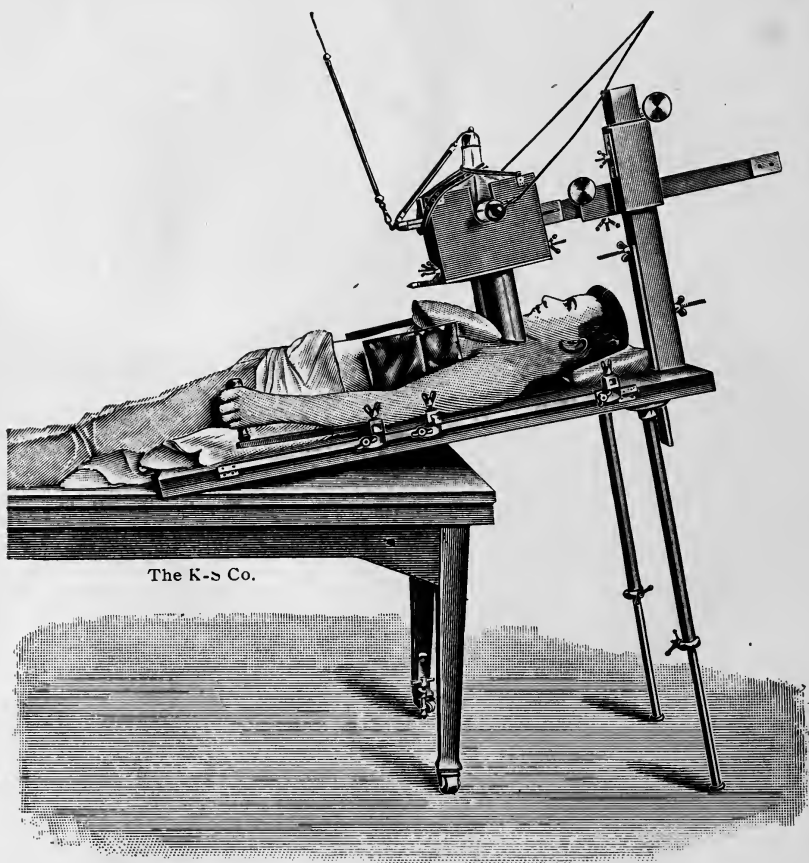
THE KNY-SCHEERER CO., N. Y.

G/.5815 Double Diaphragm in position for exposure of the Costal Cartilage.

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

## X-RAY APPARATUS—Groedels Double Diaphragm.

- G/..5814 **Suspension Diaphragm for Radioscopy**, especially suitable for the examination of the heart and lungs, consisting of a metal plate which is suspended on cords sliding over small pulleys, fastened to the ceiling, with adjustable slit shutter and slide bar for the X-ray tube-holder, mounted on the rear of the plate; including rollers, cords, and counterweight ..... \$70.00



The K-S Co.

G/..5815. Double Diaphragm in position for exposure of the Pulmonary Apices.

- G/..5815 **Dr. Groedel's Double Diaphragm** for exposures of the Pulmonary Apices and of the Ossification of the Costal Cartilage, complete, including case, board with leather-covered braces and handles for placing patient in comfortable but firm position, and carrier for plate holder, serving also for compression, without plate holder and X-ray tube ..... 175.00
- G/..5816 **Special Low Plate Holder** for size 7" x 9½" plates ..... 3.75
- G/..5817 **X-ray Tube with 2 Anticathodes** with focii of 3" distant from each other. With osmo regulator. Diameter of bulb, 8" ..... 75.00

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD

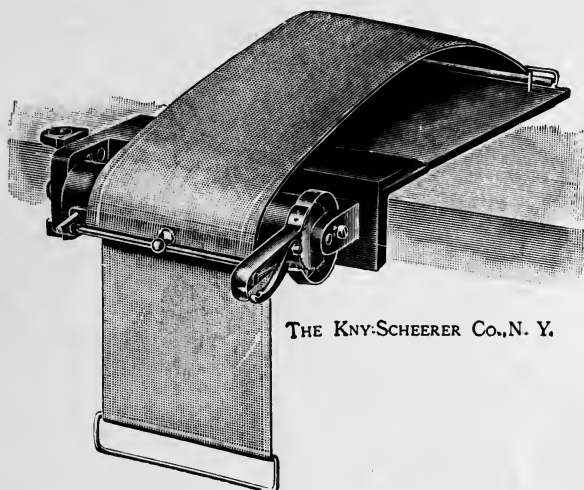


Pictures of the Pulmonary Apex.



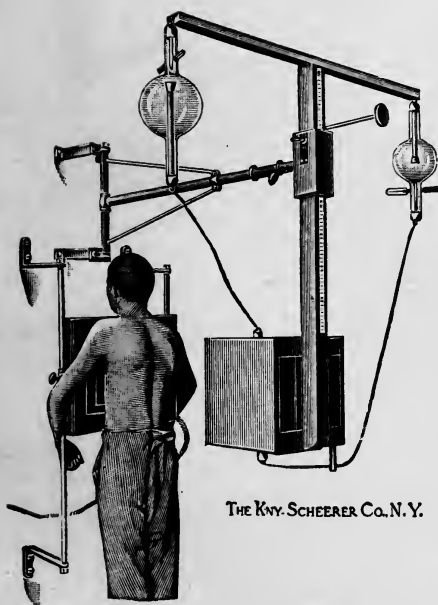
Pictures of the Ossification of the Costal Cartilage.





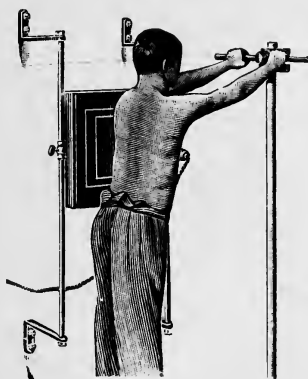
THE KNY-SCHEERER CO., N. Y.

G/. .5823



THE KNY-SCHEERER CO., N. Y.

G/. .5821



G/. .5822

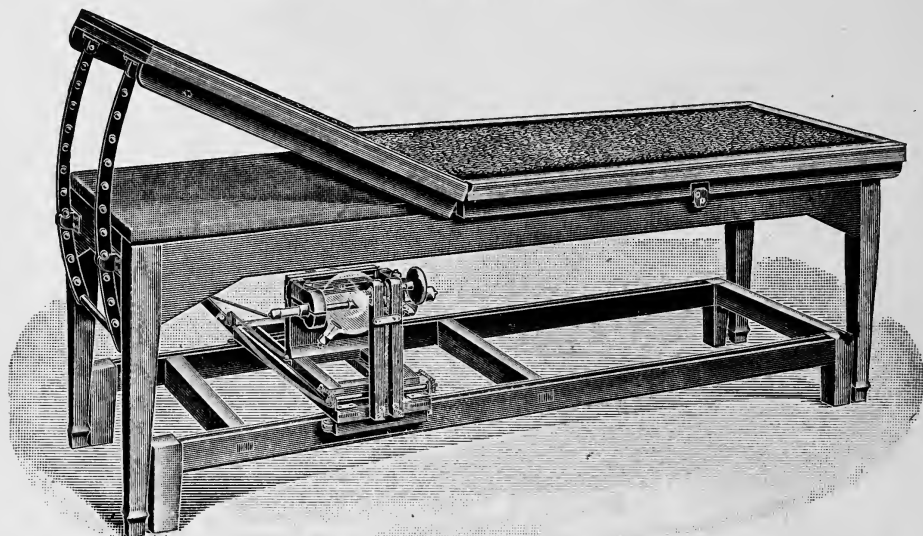


THE KNY-SCHEERER CO., N. Y.

- |           |  |         |
|-----------|--|---------|
| G/. .5821 | <b>Wall Bracket for Instantaneous and Tele Exposures</b> , with adjustable arm. Apparatus consists of a telescopic tube arrangement carrying the diaphragm case, which can be lowered or raised by means of rack and pinion, suitable for tubes up to 10" diameter ..... | \$90.00 |
| Code MEER |  |         |
| G/. .5822 | <b>Parallel Bracket</b> , with adjustable carrier for plate holders. For placing the length of plate either horizontal or vertical and at any desired height.....  | 27.50   |
| Code MELK |  |         |
| G/. .5823 | <b>Compression Band for Fixing</b> the patient to an examining table, suitable for local and general radiography .....   | \$25.00 |
| Code MEFA |  |         |

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

## 2. Tables for Examination and Treatment.



G/. .5831-32-33

G/. .5829	<b>Table Stand</b> with adjustable plate for different heights, suitable for ex-	
Code MOHR	posures of the hand and arm.....	\$20.00
G/. .5830	<b>Plain Table for Radiography and Radioscopy,</b> with detachable can-	
Code MOIDE	vas top .....	23.00
G/. .5831	<b>X-ray Table with Detachable Top</b> with double felt upholstery and	
Code MOJAD	hinged head end, for placing the patient into a convenient position..	50.00
G/. .5832	<b>Frame for Table G/. .5831</b> (also suitable for other tables), for radioscopy	
Code MOJEM	and radiography where the X-ray tube is placed beneath the table.	
	The tubeholder can be displaced in a side and lengthwise direction.	
	Price, including protective case.....	60.00
G/. .5833	<b>Canvas Top</b> for radioscopy and radiography with tube placed under-	
Code MOKE	neath the patient, used in connection with G5832 on tables with de-	
	tachable plate .....	9.00

### Modifications of Table G/. .5831.

a.	<b>Mounting</b> on legs of heavy, rubber tired wheels .....	4.50
b.	<b>Cushions</b> for fixing the position of the patient, which can be clamped to the edge	
	of the table G5831. The complete set consists of 6 cushions, each.....	3.00
c.	<b>Knee Rest</b> for table G5831.....	3.00
d.	<b>Frame</b> with opening for holding fluorescent screen or plate holder, to be placed	
	above the patient, movable along the edge of the table and with clamp	
	for fastening to the edge of table G5831. This frame can be used in	
	connection with G5832 .....	50.00



G/..5845

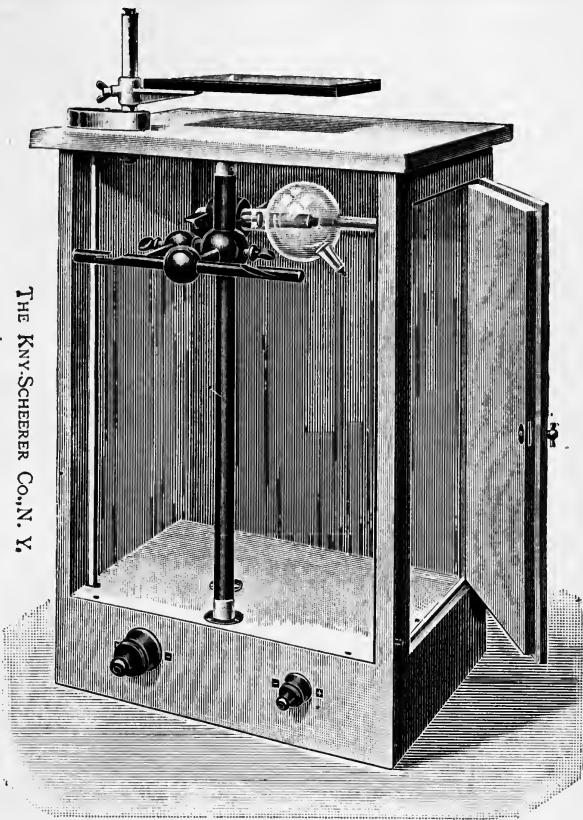
G/..5845 **Chair**, for making exposures of the shoulders while their respiratory motion is suppressed; suitable also for ventrodorsal and dorsoventral thorax exposures, and for the radio-therapeutic treatment of the head, neck, shoulders, etc.....

\$ 55.00

G/..5851 **X-ray Operating Table** for the extremities, used alternately in connection with X-ray and incandescent light, consisting of a small white enameled table with adjustable tubeholder and carrier for the flexible cords; foot selector switch for controlling the incandescent light and X-ray which serves simultaneously to swing the fluorescent screen into the field of examination, is mounted to the base of the table. The latter is further provided with an adjustable screen holder, 2 connecting sockets and plugs for the incandescent lights, a diaphragm slide with three round and one rectangular apertures and an X-ray tube holder.

To facilitate adjusting the X-ray tube a small door is provided on the side. The diaphragm slide can be operated with the elbow. For the protection of the operator and his assistants the inside of the table is lined with lead about 1/16 of an inch thick, with the exception of a small square in the table plate which is covered with a thin, clear board. The rear side is open. The construction of the table is in conformity with aseptic requirements. Price, without fluorescent screen.....

96.00



G/..5851

G/..5862 **The Protractor for localizing foreign bodies** represents the most simple instrument designed for this purpose, and is equally well suited for radioscopic and radiographic examinations. The depth can be read from the instrument. The measurements are taken from stereoscopic images, taken with X-ray tubes as listed under G/5759 . Net, \$25.00  
*Code MANGE*

## PROTECTIVE PLATES OF LEAD GLASS

G/..5874 <b>Size of Plate</b> 5 x 7", each..... <i>Code MAMOL</i>	\$1.00
G/..5875 <b>Size of Plate</b> 7 x 9½", each..... <i>Code MONAC</i>	1.50
G/..5876 <b>Size of Plate</b> 9½ x 12", each..... <i>Code MONCH</i>	2.50
G/..5877 <b>Size of Plate</b> 12 x 16", each..... <i>Code MOND</i>	4.50
G/..5878 <b>Size of Plate</b> 12 x 20", each..... <i>Code MONER</i>	6.00
G/..5879 <b>Size of Plate</b> 16 x 20", each..... <i>Code NARYX</i>	8.00
G/..5883 <b>Sheet Lead</b> , for masks, 1/32" thick, 24" wide, per sq. ft..... <i>Code NASAK</i>	.50
G/..5886 <b>Special Rubber Cloth</b> , almost impenetrable to the X-rays, 24" wide, per sq. ft. .... <i>Code NATET</i>	2.00
G/..5887 <b>Protective Apron</b> , large size, lined with heavy linen, with leather belt.. <i>Code NATIL</i>	22.00
G/..5888 <b>Protective Apron</b> , small, with belt..... <i>Code NATRE</i>	13.50
G/..5889 <b>Protective Mask</b> for face and beard, with lead glass windows..... <i>Code NATUR</i>	15.00
G/..5890 <b>Protector</b> for the hand, made of special rubber cloth for covering the back of the hand, with the palm open for the free use of the fingers; per pair .....	11.00
G/..5891 The same, in the form of fingerless gloves; per pair..... <i>Code NAUPO</i>	11.00
G/..5893 <b>Protective Goggles</b> , with large round lead glass windows of 1¾" diameter, including case .....	5.00
G/..5896 <b>Protective Handle</b> , for fluorescent screens G5795 to G5799 .....	1.75
<i>Code NAXNOR</i>	

## h. Orthodiagraphs.



THE KNY-SCHEERER CO., N. Y.

G/.5900 In vertical position.

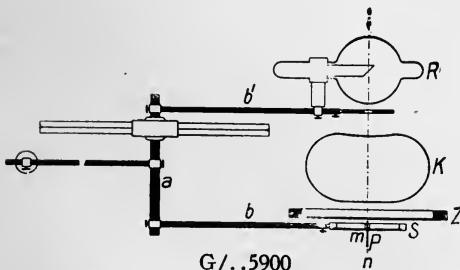


THE KNY-SCHEERER CO., N. Y.

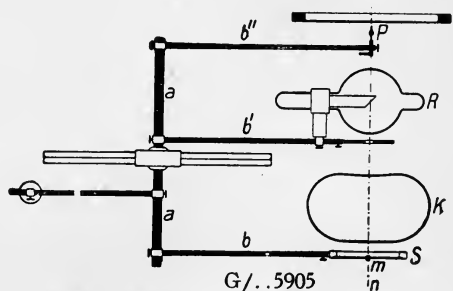
G/.5900 In horizontal position.

G/.5900 **Dr. Levy-Dorn's Orthodiagraph for Radioscopy and Orthophotography**, designed for the determination of the exact size and shape of the heart, with universal movement so as to make it suitable for exposures with the patient in horizontal and vertical positions.

Price, including self-centering or ordinary tube holder, interchangeable diaphragm, centering device, and fluorescent screen, with dermograph. **\$150.00**



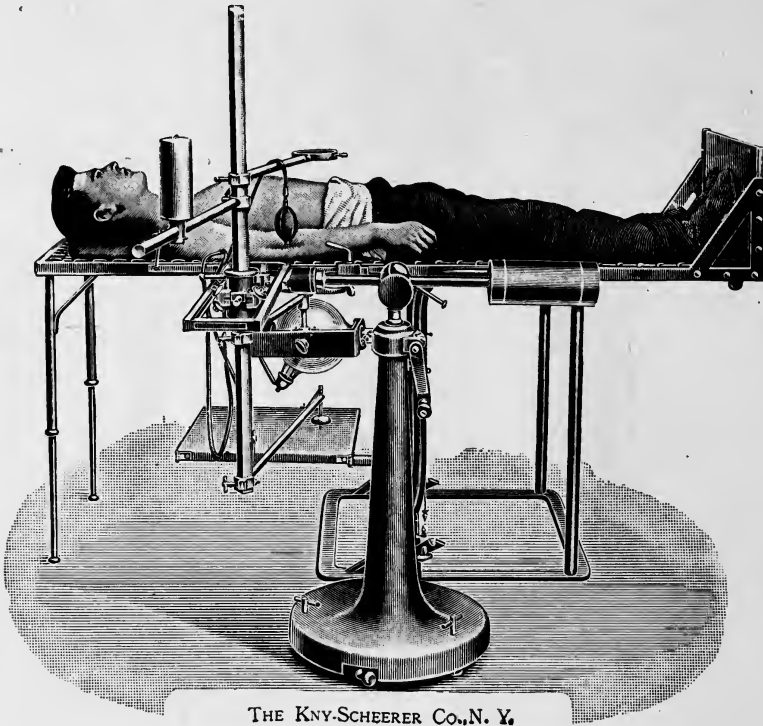
Schematic Drawing, showing positions of tube, the human body drawing board and fluorescent screen with dermograph.



Schematic Drawing showing positions of drawing board, tube human body and fluorescent screen with Termograph.

### Modifications.

- |  |                      |
|--|----------------------|
| <p><b>a. Interchangeable Diaphragm</b>, with apertures of any size desired, usual openings<br/> <i>Code NEBBI</i> of diameter <math>1\frac{1}{8}</math>", <math>1\frac{1}{2}</math>" or 2"..... each</p>   | <p><b>\$3.50</b></p> |
| <p><b>b. Measuring Attachment</b> for the determination of the height and width of the body<br/> <i>Code NEBEU</i> under examination, consisting of <b>two scales</b>, with adjustable pointers,<br/>                     and recording device for dimensions, additional cost .....</p> | <p><b>24.00</b></p>  |
| <p><b>c. Two Belts</b> attached to drawing board for fixing patient; additional price.....<br/> <i>Code NEBHOR</i></p>   | <p><b>3.50</b></p>   |
| <p><b>d. Pneumatic Drawing Attachment</b>, additional price.....<br/> <i>Code NEBRO</i></p>  | <p><b>5.00</b></p>   |



THE KNY-SCHEERER CO., N. Y.

G/..5905 In horizontal position with Tilting Table G/..5906.

This orthodiagraph improved by Dr. Groedel-Nauheim differs from the preceding design in so far as not only the size and shape of the intestines of the thorax can be determined, but it is further possible to ascertain their relative position to the outline of the body, and to affix to the drawing the division line from the jugulum to the xyphoid process. The drawing board is thereby placed behind the tube, and the fluorescent screen in front of the body, interchangeable against the guide rod. By means of the X-rays, the outlines of the intestines are first marked on the board, then the X-ray tube is disconnected, and the outline of the body is followed with the guide rod.

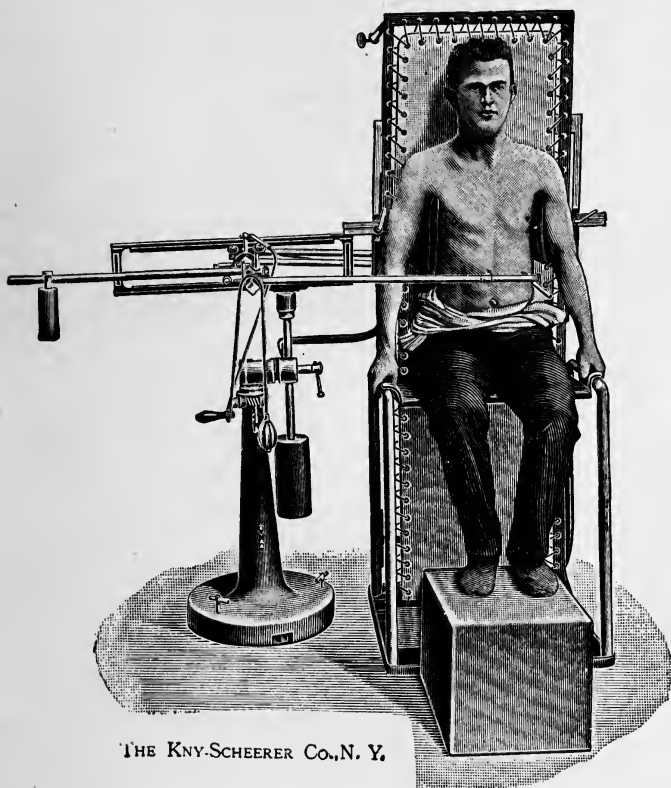
For fixing the patient, a tilting table is most convenient, as without a firm support the patient is unable to maintain his position for any length of time, and the orthodiagram will be inaccurate. The drawing pencil is actuated by a pneumatic rubber bulb.

G/..5905 **Orthodiagraph**, complete with drawing board behind the tube, small  
*Code NEBBI* barium platino-cyanide screen covered with lead glass plate, interchangeable with the guide rod, both being provided with bayonet joint. Price, including diaphragm, pneumatic drawing device, paper clamp, and two interchangeable centering devices for setting the orthodiagraph, including spindle with worm gear and crank for raising and lowering apparatus ..... \$250.00

G/..5906 **Tilting Table**, with seat, foot rest and leather-covered braces as support.  
*Code NEBEN* for the patient in the standing, sitting or lying positions. Price.... 50.00

---

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.



THE KNY-SCHEERER CO., N. Y.

G/..5905 In vertical position with Tilting Table G/..5906.

G/..5907	<b>Protective Wall</b> , suitable for use with the orthodiagraph G5906, consisting of steel frame with movable lead glass window and protective curtain of rubber lead oxide material for the lower part of the body of the operator. For use in the upright position only .....	\$62.00
Code NEBHA		
G/..5908	<b>Curtain on Table</b> G5906, for the protection of the abdomen and the legs of the operator during orthodiagraphic work, with the patient in the recumbent position .....	31.00
Code NEBRO		
G/..5910	<b>Orthodiagraphic Blanks</b> , with suitable imprint, in lots of 100, with heavy cardboard folder .....	3.50
Code NECAB		

## Modifications.

a.	Pneumatic Drawing Device to mark onto the skin of the patient .....	\$15.00
Code NECED		
b.	High Tension Current Transmission, permitting orthodiagraphic work in any position, without changing the wire connectors to tube .....	4.50
Code NECK		
c.	Stop Cock, with three line pneumatic drawing device, which allows the simultaneous drawing on the skin and on the drawing board, including rubber hose .....	7.50
Code NECRO		
d.	Foot Bellows .....	5.00
Code NEDER		
e.	Swivel Attachment to the tilting table, to fix the same in any angular position..	13.50
Code NEFAU		

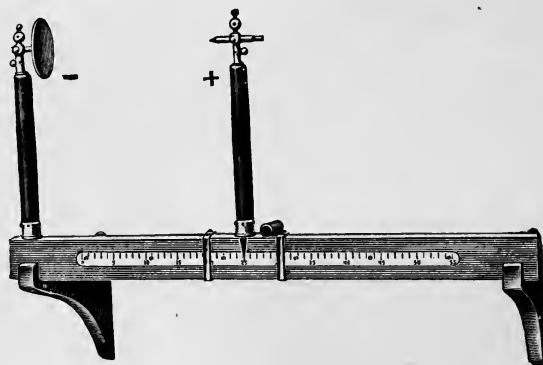
THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

## 1. Measuring Devices.

### 1. Spark Gap.

According to the vacuum of a tube the potential of the electric current necessary to produce X-rays varies. A "soft" X-ray tube, for instance, represents a resistance equal to a spark gap of from  $2\frac{1}{2}$  to  $3\frac{1}{4}$ ". To break the resistance of very "hard" tubes a potential equal to that of a spark gap of from 10 to 12" is necessary.

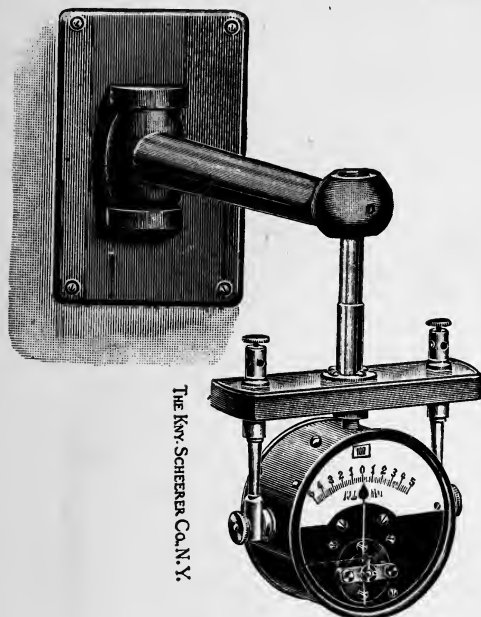
The spark gap, therefore, is a convenient, but not very accurate, means for determining the vacuum of a tube and is often used for radio-therapeutic measurements. It serves further as a protective device for the tubes against puncturing, when connected in parallel with the tube. If the latter becomes too hard the discharge will take place across the spark gap.



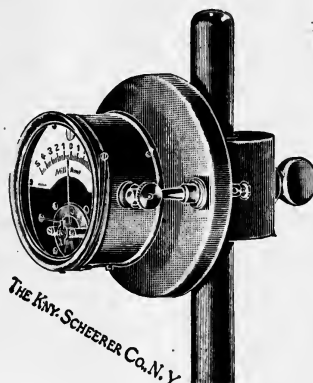
G/..5923

G/..5923 <b>Spark Gap</b> , with scale, consisting of two hard rubber columns, one of	
<i>Code NEGHE</i>	which carries a metal disk, while the other is provided with a pointed metal rod; one of the columns slides along the scale. For spark lengths up to 12" .....
	\$10.00
G/..5924 The same, for spark lengths up to 20" .....	
<i>Code NEGIT</i>	11.00
G/..5925 The same, for spark lengths up to 28" .....	
<i>Code NEGLE</i>	12.00

## 2. Milliamperemeter.



G/..5929



G/..5930

- G/..5929 **Milliamperemeter**, for measuring the intensity of current passing through an X-Ray tube, provided with self-contained protective condenser, and mounted on insulated bracket for fastening to the wall..... \$18.75
- G/..5930 The same, for attaching to X-ray tube stands..... 17.50
- Code NEGOS*
- Code NEGRU*

G/..5931 **Self-registering Milliamperemeter**, designed on the principle of self-registering barometers; the drum, on which the paper sheet revolves, makes one revolution every ten minutes. These records can be provided with the name of the patient, and other data; to be attached to the report relating to the disease. Price, including wall bracket.. 115.00

*Code NEGRUN*



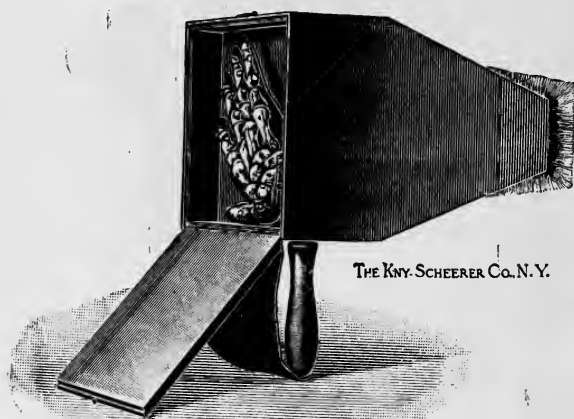
G/..5936

G/..5936 **Wehnelt's Precision Crypto-Radiometer**, is a modification of the radiometer of Benosit. A silver strip and wedge-shaped piece of aluminum are mounted side by side, and can be moved by means of a rack and pinion behind a narrow strip of fluorescent screen, so that the lower half of the screen is covered by silver of uniform thickness, the upper half by aluminum of variable thickness.

Silver has the peculiarity that it allows the same amount of rays to pass whether the tube is soft or hard; the luminosity of the field covered by the silver remains, therefore, uniform, and is used as a standard. The luminosity of the part of the screen covered by the aluminum changes according to the condition of the tube and the tube and the thickness of the aluminum.

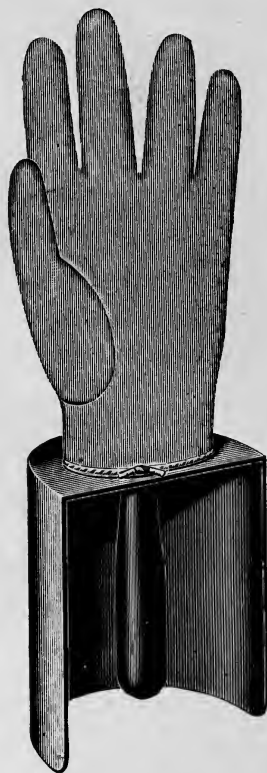
The graduated aluminum strip is shifted until the color and luminosity of both the halves of the fluorescent screen are identical. The penetration of the tube is then read from a scale.

It is thus possible to obtain the most accurate comparison of the degree of penetration of different tubes, or to use the same dose for therapeutic purposes. The tube is examined first, and the amount of current used is increased or diminished as the case may be, until the fluorescence of the screen agrees at the desired position of the scale. Price, .... \$24.00



THE KNY-SCHEERER CO. N. Y.

G/..5937



G/..5938

G/..5937 **Cryptoskiascope**, consisting of a fluoroscope with a lead glass protective screen for the eyes and protected handle as support. A box containing a skeleton hand is placed before the fluorescent screen to allow an approximate measurement of penetration. The operator's own hand is therefore never used to gauge the tubes. Price..... \$30.00  
*Code NEIXE*

G/..5938 **Test-Hand**, consisting of a skeleton hand, surmounted by a wax composition of a permeability equal to that of the tissues of the hands..... 8.00  
*Code NEKOD*

G/..5939 **Standard Scale** for measuring the penetrating power of the X-rays. The instrument consists of a plate to which are attached a strip of silver foil, an aluminum strip of six different thicknesses, with a scale discernible during examination. According to the penetrating power, which is coincident with the state of vacuum of the tube, one of the thin or thick fields of the aluminum strip will show the same shadow as the silver strip. The results are independent of the focal distance or the degree of fluorescence of the tube..... 6.00  
*Code NEKRE*

### 3. Instruments for Measuring the Chemical Effect of the X-rays.

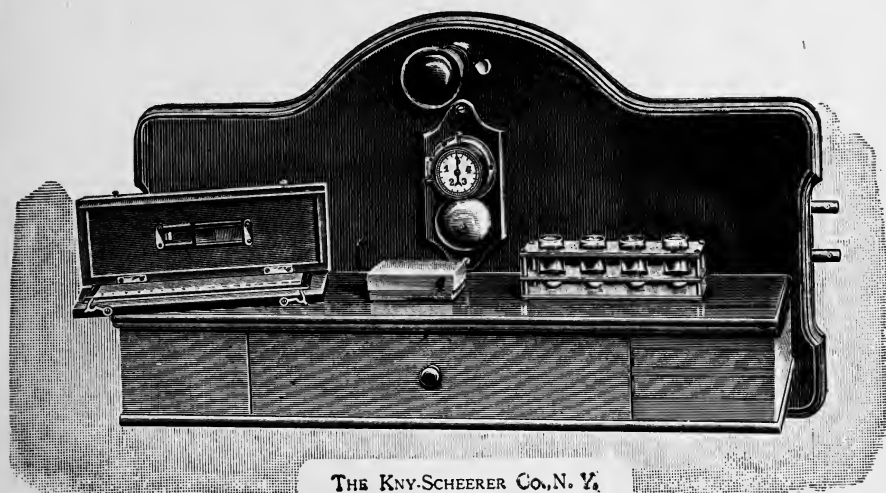
G/..5942 **Radiometer**. Model Sabouraud et Noiré consisting of standard scale, with four disks of different tints for comparison, and one set of barium platino-cyanide discs..... 10.00  
*Code NELEN*

G/..5944 **1 Dozen Discs for Radiometer G5942** ..... 15.00  
*Code NELIT*

---

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

# Quantimeter.



G/.5956. Wallplate with drawer, ruby incandescent lamp, standard scale and stand for four test tubes.

This method is based on the discoloration of bromide of silver under the influence of X-rays. Compared with the chromo-radiometers of Holzkecht or Sabouraud, it has the advantage that it is more sensitive, gives more subdivisions, leaves a permanent record, and is much cheaper. Its only disadvantage is that the results can only be read off after a strip of silver paper has been developed, a process which occupies three minutes. There is no need to resort to a dark room, as with the aid of a small light-tight box the development can be done in daylight in the consulting room.

The apparatus consists of:

1.—Strips of bromide of silver paper measuring  $\frac{1}{2}$  inch by  $2\frac{1}{2}$  inches, enclosed in small light-tight envelopes. The envelopes bear a label to be filled out with the name of the patient, date and length of the exposure; envelope and strip bear identical numbers.

2.—A standard scale in wooden case, containing 17 different tints of the colors which the bromide of silver will assume gradually under prolonged influence of the X-rays. A runner, with glass windows slides along the scale, and the developed strips are placed into this frame.

3.—A set of 4 test tubes of 1 inch in diameter and 2 in length, in a small metal stand.

4.—A convenient addition in many cases is the dark box, which enables the operator to develop the strips in the consulting room in daylight. This box is shown in the illustration; it has room for the stand containing the glass tubes with developing and fixing solutions, and can be provided with a clock striking a bell at from 1 to 4 minutes as required for full development.

## Quantimeter, Set I.

G/.5946	Standard Scale in polished walnut box.....	\$8.00
Code	NELOM	
G/.5947	Fifty Strips of Bromide of Silver Paper, in dark envelopes with labels	
Code	NEMAS and numbers .....	3.00
G/.5948	Stand with Four Test Tubes .....	2.50
Code	NEMEA	
G/.5949	Three Aluminum Strips.....	1.00
Code	NEMAB	
G/.5950	One Aluminum Strip, with Three Degrees of Thickness .....	1.00
Code	MIGUE	
Total.....		\$15.50

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

# X-RAY APPARATUS—Quantimeter.

## Quantimeter, Set II.

G/..5951	Quantimeter Set No. I .....	\$15.50
Code NEUGO		
G/..5952	½ Liter Developer A } .....	1.75
Code NENIA	½ " " B }	
G/..5953	1 Liter Fixing Solution .....	.50
Code NEUNF		
G/..5954	1 Extra Wide Clip for the simultaneous development of several strips of paper .....	1.50
Code NEOD		
G/..5955	1 Alarm Clock .....	3.75
Code NEOFI		
Total.....		\$23.00

## Quantimeter, Set III.

G/..5956	Quantimeter Set No. II .....	\$23.00
Code NEELA		
	Wallplate with drawer and ruby incandescent lamp .....	12.25
Total.....		\$35.25

## Quantimeter, Set IV.



G/..5957	Quantimeter Set No. III .....	\$23.00
Code NEEMY		
	Dark Box to Develop the Strips in Daylight .....	13.50
Total.....		\$36.50

G/..5959	Benzin Lamp for testing the sensitiveness of the strips of silver paper, .....	\$11.50
Code NEOPU		

### 4. Measuring Devices for the Focal Distance and Concentration of the Focus, Centering Tube.

G/..5961 **Focometer**, for determining the focus of an X-ray tube, consisting of  
 Code NEPAL 6 wires of different diameters, placed in front of a fluorescent screen, provided with protective glass and mounted into a tube, one side of which is held against the X-ray tube during the examination.

The better the concentration of the focus, the more wires will show on the fluorescent screen by observation from the other end of the tube. \$24.75

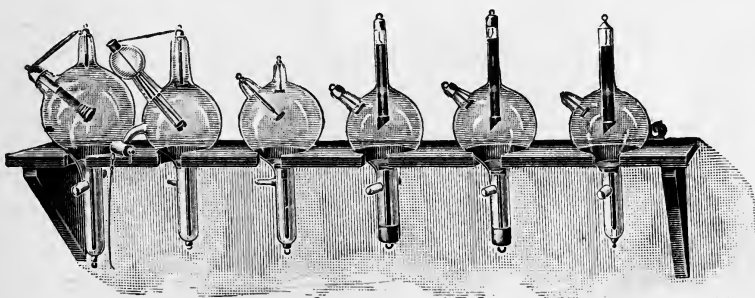
THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

# X-RAY APPARATUS—Accessories to X-Ray Equipment.

G/..5962 Code NEPHE	<b>Rule for Measuring</b> the distance from the tube to the plate holder or surface of the body, consisting of a telescope arrangement of two tubes with an end piece of a cup-like shape for holding against the X-ray tube .....	\$14.50
G/..5963 Code NEJID	<b>Simple Centering Device</b> , consisting of a metal tube with small fluorescent screen, and wire for centering placed in the axis of the tube. If the X-ray tube is properly centered, this wire will show up as a dot.....	15.00
G/..5964 Code NEPUC	<b>Adjusting Device</b> , to be used in connection with diaphragm apparatus G/5810/11, consisting of a frame with 2 telescopic tubes, which can conveniently be attached to these diaphragm stands, for ascertaining the direction of the central X-rays. ....	72.00

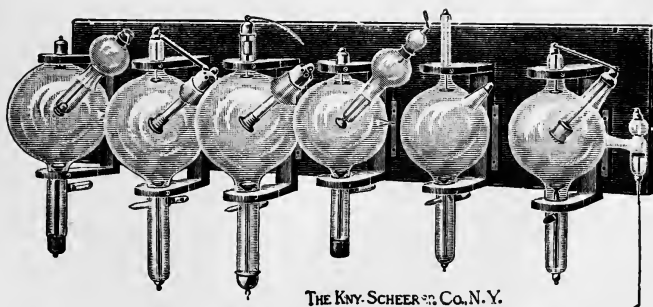
## m. Accessories for X-ray Laboratories, and Auxiliary Devices for Radioscopy, Radiography and Radiotherapy.

### 1. Wall Racks.



G/..5969

G/..5969 Code NEQUE	<b>Wall Rack</b> of oak for 6 X-ray tubes .....	\$6.00
------------------------	---	--------



THE KNY-SCHEERER CO., N. Y.

G/..5871

G/..5971 Code NEXAS	<b>Wall Board</b> of oak, for storing X-ray tubes, with self-centering tube holders, for 6 tubes.....	6.00
------------------------	---	------

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

## 2. Lamp for Osmo-Regulator, Connecting Cords, High Tension Switchboard, etc.



G/..5974

G/..5974 **Alcohol Lamp** for osmo-regulator, consisting of small metal lamp with  
Code NIBBI wick and cap, mounted on long hard rubber handle..... \$3.25

G/..5975 **Connecting Cord**, of stranded copper, with hard rubber sleeve over con-  
Code NIBIL nection tip, for currents up to 10 amperes:

2½ ft. long.....	\$ .50
4 ft. long.....	1.00
7 ft. long.....	1.50

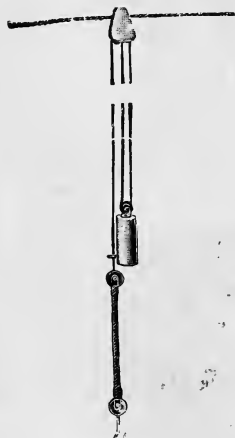
G/..5976 The same, for currents up to 25 amperes:  
Code NICAG

2½ ft. long.....	1.00
4 ft. long.....	2.00
7 ft. long.....	3.00

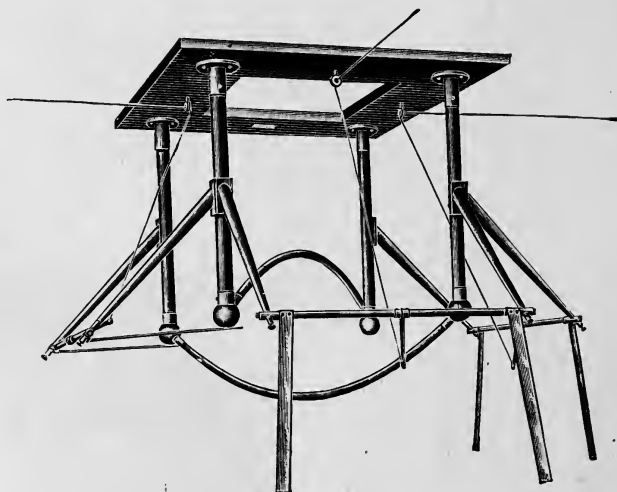
G/..5977 **Connecting Cord** reinforced with cotton braiding for use with control-  
Code NICCO ling table, G/5603 9 ft..... \$17.50

per yd.....	6.00
-------------	------

G/..5978 **Rubber Insulated connecting Cord**, to be strung between tube and induc-  
Code NICCG tion coil, 6 ft. long ..... per pair, 2.00



G/..5979



G/..5980

G/..5979 **High Tension Conductors** to be strung between two opposite walls in  
Code NICHI the X-ray laboratory, with silk cord insulation on both ends. Roll-  
ing over these wires are small trolley wheels which are attached to  
the connecting cords, tightened by counterweights, which serve to  
tap off high tension current in any part of the room..... \$9.00

## X-RAY APPARATUS—Timing Devices.

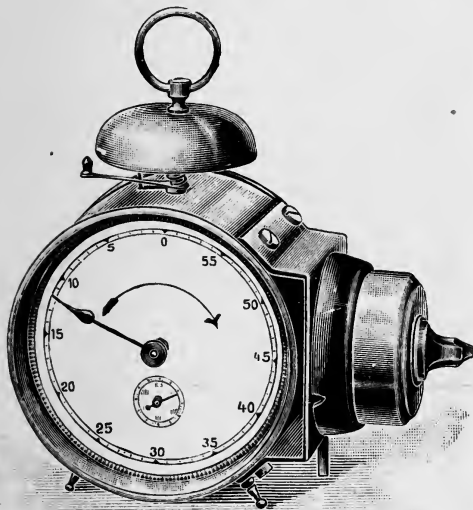
When ordering, please mention the size of the room, and also specify whether the walls to which these wires are to be fastened consist of wood or stone.

G/..5980 **High Tension Board** with switch arrangement for 3 way circuits. This *Code NICKU* permits of the alternate use of three different tubes without the necessity of changing the connections every time. Price, including three pairs of pulleys, with weights and cords ..... \$65.00

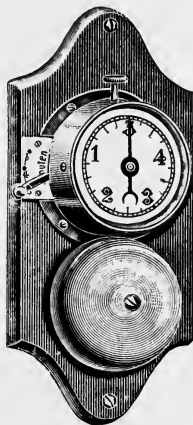
When ordering, please observe the same precautions as mentioned under G5979.

G/..5981 The same as listed under G5979, with high tension switchboard for 4 *Code NIEVES* circuits ..... 97.50

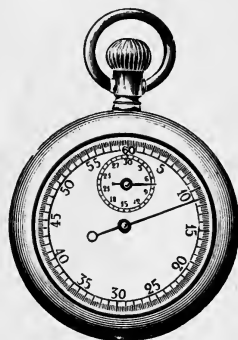
### 3. Timing Devices.



G/..5986



G/5987



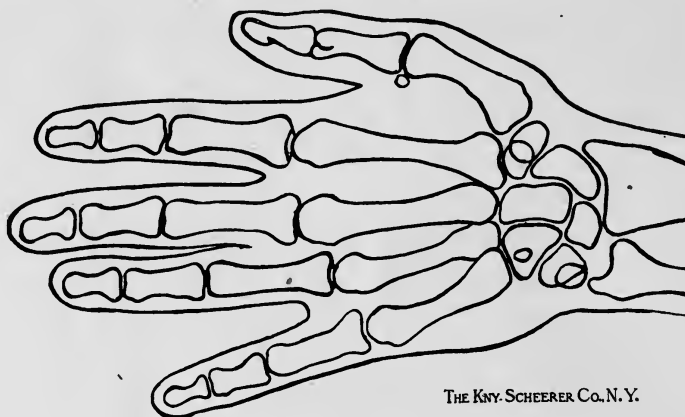
G/5988

G/..5986 **Time Switch** for therapeutic treatment, consisting of a clock and switch, which latter is connected to the primary circuit of the induction coil. After the time for which the clock is set has elapsed, the switch is automatically opened and the current circuit interrupted. The clock can be set for intervals up to sixty minutes. This device is equally well suited for timing the development or rinsing of plates. \$12.00  
*Code NIDIF*

G/..5987 **Alarm Clock** for up to five minutes, with dial marked from 5 to 5 seconds, giving an alarm at 3, 4, 5 minutes..... 3.75.  
*Code NIEDE*

G/..5988 **Precision Pocket Stop Watch** ..... 10.00  
*Code NIELA*

**4. Radiogram Charts, etc.**



THE KNY-SCHEERER Co., N. Y.

G/..5990

G/..5990 **Radiogram Charts** for recording results of radioscopic and radiographic  
Code *NIERKA* examinations; used to advantage in reports regarding insurance and  
legal cases.

Chart blocks of 25 sheets, with perforated margin, are published for the following parts  
of the skeleton:

- a.* —**Head** (seen from the side, left and right);
- b.* —**Spine** (cervico-dorsal), neck (from the side);
- c.* —**Thorax** (dorso-ventral and ventro-dorsal);
- d.* —**Spine** (part of the kidneys and coccyx);
- e.* —**Pelvis**;
- f.* —**Shoulder** (left and right);
- g.* —**Upper Arm** (left and right);
- h.* —**Elbow Joint**—(left and right; palm of hand towards tube);
- i.* —**Elbow Joint** (left and right, from the side);
- k.* —**Forearm** (left and right);
- l.* —**Hand** (left and right);
- m.* —**Thigh** (left and right);
- n.* —**Knee Joint** (left and right, flexor and extensor side);
- o.* —**Knee Joint** (left and right, from the side);
- p.* —**Lower Leg** (left and right);
- q.* —**Lower Leg** (left and right, from the side);
- r.* —**Ankle** (left and right, dorso-plantar);
- s.* —**Foot** (left and right, from the side);
- t.* —**Foot** (left and right, dorso-plantar);

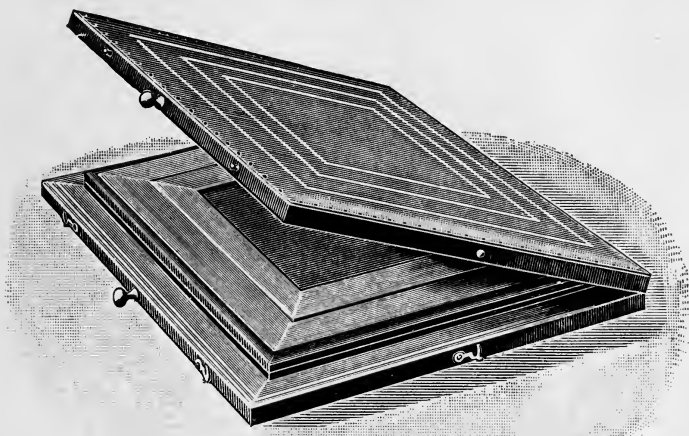
Price, per block of 25 sheets..... \$ .25

G/..5997 **Stomach Sound**, consisting of rubber of a low permeability for the X-rays..... 3.50  
Code *NIHIL*

G/..5998 **Bismuth Pills**, for stomach examination, each box containing ten pills,  
Code *NIKOR* per box ..... 4.00

ACCESSORIES FOR THE RADIOGRAPHY.

Plate Holders.



THE KNY-SCHEERER CO., N. Y.

G/. .6001-3

To properly expose a photographic plate it is necessary to either envelope the same with a non-actinic paper or place it into a suitable holder, thereby protecting the same against light, causing fog or other damage to the sensitized emulsion of the plate, when placed beneath the patient. Plate holders are preferable to paper wrappers, as they are constructed so that if the weight of the body rests thereon it cannot possibly break the glass plate.

Furthermore, if an exposure is to be made with the aid of an intensifying screen, one large size of screen becomes adaptable to all smaller sizes of plates when used in a plate holder, while with the use of a paper wrapper or envelope the screen must be precisely the size of the photographic plate, which means that a number of screens are required, as it is not practical for the radiographer to limit himself to one size of plates.

Our plate holders are made in two sizes with additional kits in each, so as to permit small standard sizes of X-ray plates to be used. The cover of the plate holder has the various sizes outlined, corresponding to the kits contained therein. A layer of lead foil is placed at the bottom of each plate holder to overcome secondary radiance.

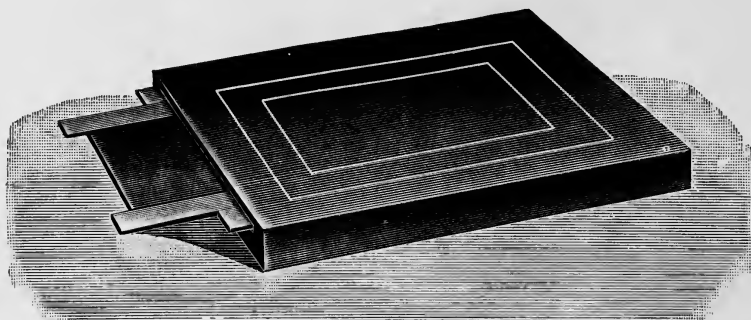
G/. .6001	Plate Holder, best quality for plates up to and including 10 x 12", with	
Code NILDE	set of kits adapted to plates 8 x 10, 6½ x 8½ and 5 x 7".....	\$6.00
G/. .6002	The same, up to and including plates 14 x 17", with sets of kits 11 x 14,	
Code NILGO	10 x 12 and 8 x 10".....	9.00
G/. .6003	The same, up to and including plates 10 x 12", extra thin, with sets of	
Code NILIC	kits 8 x 10, 6½ x 8½ and 5 x 7".....	7.50

# X-RAY APPARATUS—X-Ray Stereoscopes.

## Plate Holder for Stereoscopic Radiography.

These holders are required, where two or more exposures are to be made with the tube placed at a slightly different focus at each exposure. They are constructed to permit of a ready removal of the exposed plate and the insertion of a second plate without disturbing the position of the patient.

A complete set of instructions for the technic accompanies each plate holder. Plates obtained with the stereoscopic method can be examined with our stereoscopes listed under G/..6021-29.



G/..6011-12

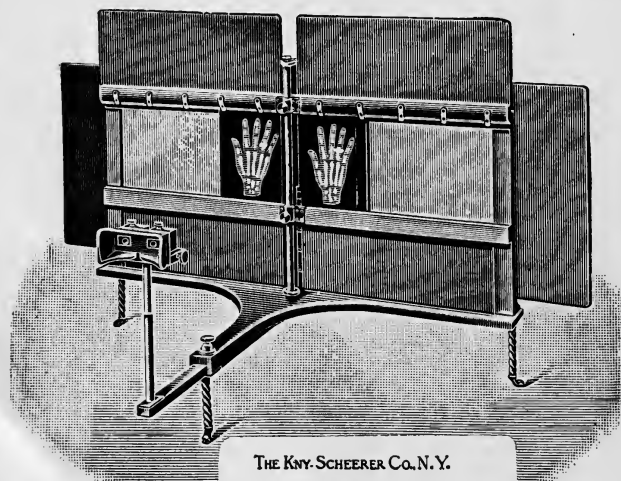
G/..6011 **Plate Holder for Stereoscopic Radiography**, very best quality, for plates  
*Code MINET* up to and including 10 x 12", with sliding frames to permit the use  
of plates size 8 x 10, 6½ x 8½", price ..... \$7.00

G/..6012 **Plate Holder for Stereoscopic Radiography** up to and including plate  
*Code NEUFE* size 14 x 17", with sliding frames to permit the use of plates size  
11 x 14, 10 x 12 and 8 x 10"..... 10.00

(With this plate holder detailed instructions are furnished with our special pamphlet, entitled, "Practical Hints on X-ray Photography." Photographic plates, or copies from plates, taken by this method, can be examined with our camera stereoscopes, Nos. 6021/29).

G/..6016 **Black Light Proof Wrapping Paper**, for the plates, each sheet..... \$ .10  
*Code NIMRO*

## X-ray Stereoscopes.



THE KNY-SCHEERER Co. N. Y.

G/..6021

This stereoscope is constructed in accordance with the usual types, provided with adjustable prisms and observation windows to permit an easy adjustment to suit the various eye sights.

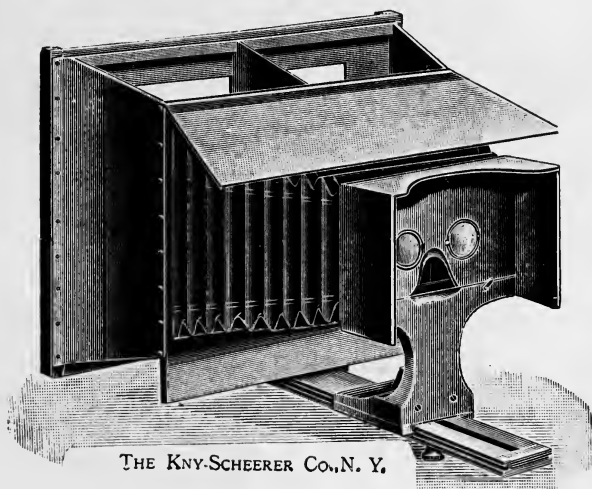
The stereoscopic negatives, or positives thereof, are placed into the adjustable frames provided for the same. These frames are fitted with protecting shields to eliminate the undersired light around the picture, and to permit the same to pass through the plate only (we refer to G/..6011-12 for plate holders adopted for stereoscopic work).

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

# X-RAY APPARATUS—X-Ray Stereoscopes.

G/..6021	<b>Prism Stereoscope</b> , according to Dr. Walter, for plates up to <i>Code NINOX</i> 10 x 12".....	net	\$60.00
G/..6022	<b>Prism Stereoscope</b> , according to Dr. Walter, for plates up to <i>Code NINY</i> 11 x 14".....	net	65.00
G/..6023	<b>Prism Stereoscope</b> , according to Dr. Walter, for plates up to <i>Code NIPA</i> 14 x 17".....	net	70.00

## 3. Camera Stereoscopes.



G/..6026

These stereoscopes consist of a camera with removable bellows, on the front board of which the lens system is mounted. The photographic plate is to be placed in front of a ground glass, which produces uniformly diffused light for this examination.

At the top of the camera a light trap is provided, which permits the examination of paper copies.

By means of tripod G6028 a stereoscope can be mounted at any convenient place. Without the same it will be necessary to provide a suitable table.

G/..6026	<b>Camera Stereoscope</b> of Dr. Bartholdy, for plates up to and including <i>Code NIPIS</i> size 11 x 14", but with adaptors for 10 x 12 and 6½ x 8½".....	\$24.00
G/..6027	Same as above, but for plates up to and including size 14 x 17", with <i>Code NIPPE</i> adaptors for plates 11 x 14, 10 x 12, 8 x 10, and 6½ x 8½".....	32.00
G/..6028	<b>Tripods</b> for mounting the above stereoscopes .....	4.50
<i>Code NIRLE</i>		
G/..6029	<b>Hand Stereoscope</b> for the examination of reduced stereoscopic pictures .....	5.00
<i>Code NIRNI</i>		

For suitable photographic apparatus to aid in the production of reduced pictures and diapositives, we will be pleased to submit special estimates upon request.

---

**THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.**

# X-RAY APPARATUS—Photographic X-Ray Plates.

## PHOTOGRAPHIC X-RAY PLATES.

These plates, which are expressly made for X-ray work, are reliable, uniform in results and easy to manipulate. The same kind of developer and fixing bath as for ordinary plates may be used, but on account of their extreme sensitiveness great caution should be exercised while handling and developing but not exposing more than is actually necessary.

### PRICES PER DOZEN

Lumiere's X-ray Plates						Schleussner's X-ray Plates					
Thickly coated						Double coated					

## *X-RAY APPARATUS—Intensifying Screens.*

Especially during the winter season, when copying takes place very slowly, this paper offers great advantages, by putting the operator into the possession of a picture that can be conveniently handled and mailed. Detailed information in regard to this paper is contained in our pamphlet, "Practical Hints on X-ray Photography."

### **Intensifying Screens.**

G/..6075 <b>Intensifying Screen</b> , without frame, for plate holders, size 10 x 12".....	\$8.00
<i>Code NOCAG</i>	
G/..6076 <b>Intensifying Screen</b> , without frame, for plate holders, size 14 x 17".....	15.00
<i>Code NOCHU</i>	

The intensifying screen has the peculiarity of producing a blue fluorescent light when exposed to X-rays. Placed on a photographic plate, with both emulsions in contact with each other, these light, in addition to the effect of the rays, acts on the chemical decomposition of the emulsion on the plate. These 2 effects, combined, reduce the time of exposure materially, especially by placing a film between 2 such intensifying screens.

On account of the comparatively coarse grain of the screens, the pictures lose somewhat in contrast. This method, therefore, is limited for its application to the exposition of parts where a correct definition is not required, as for instance, with the heart and lungs, or in cases of fractures.

These intensifying screens can be used to advantage in connection with N. P. G. X-ray paper.

### **Chlorsilver Copying Paper, for Producing Positive Pictures Directly.**

G/..6077 <b>Highest Grade Celluloidin Paper</b> , in sheets of 19½ x 24½", each pack- <i>Code NODOP</i> age of 24 sheets.....	\$12.00
--	---------

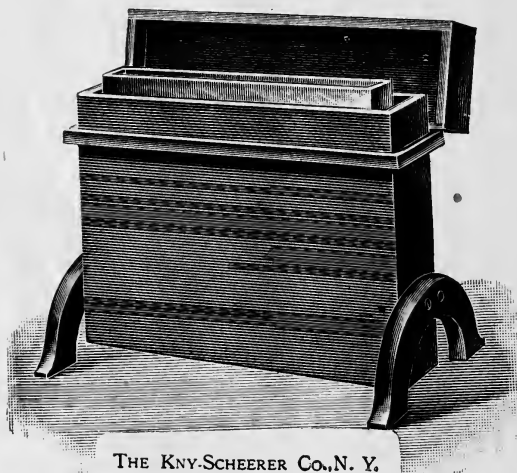
### **Chemicals for Developing, Fixing and Toning.**

<b>Acid, Acetic</b> , No. 8, per oz. in bottle.....	\$ .06
<b>Acid, Acetic</b> , No. 8, per lb. in bottle.....	.18
<b>Acid, Muriatic</b> , C.P., per oz. in glass stop. bot.....	.11
<b>Acid, Sulphuric</b> C.P., per lb. in glass stop. bot.....	.32
<b>Alcohol</b> Photo 95 per cent. per qt. in bottle.....	1.00
<b>Alum</b> , Powdered, in 5 lb. boxes, per lb.....	.11
<b>Alum</b> , Chrome, in 1 lb. carton.....	.13
<b>Borax</b> , Powdered, in 5 lb. box, per box.....	.75
<b>Gold Chloride</b> , C.P., Dry, per bottle.....	.50
<b>Hydrochinon</b> , per oz.....	.15
<b>Lead</b> , Acetate, per oz.....	.10
<b>Mercury, Bichloride</b> , in lb. bottles, per lb.....	1.16
<b>Mercury, Bichloride</b> , in oz. bottles, per oz.....	.15
<b>Metol</b> , per oz.....	.75
<b>Pot. Bromide</b> , per oz.....	.10
<b>Pot. Carbonate</b> in lb. bottles, per lb.....	.24
<b>Pot. Cyanide</b> in lb. bottles, per lb.....	.60
<b>Pot. Ferricyanide Red</b> , in ¼-lb. bottles, per bottle.....	.25
<b>Soda Bicarb.</b> cryst. in lb. box, per lb.....	.10
<b>Soda Hyposulphite</b> , in lb. boxes, per lb.....	.10
<b>Soda Hyposulphite</b> , in 5-lb. boxes, per lb.....	.06
<b>Soda Sulphite Cryst.</b> in lb. bottles, per lb.....	.16
<b>Sodium Bromide</b> , in oz. bottles, per oz.....	.10
<b>Hyposulphite of Soda</b> , C. P. for fixing negatives, per box of 1 lb.....	.10

## Developing Trays.

	Size 5½ x 7½	Size 8¼ x 10¼	Size 10¼ x 12¼	Size 12¼ x 14¼	Size 16½ x 13½
a. <b>White Steel Porcelain</b> , rectangular.....	\$0.90	\$1.50	\$2.50	\$2.75	\$4.80
b. <b>Porcelain</b> , slanting walls, with lip.....	0.65	1.15	1.80	2.75	
c. <b>Clear Cryst. Glass</b> , sq. form.....	1.10	1.50	2.50	3.50	10.00
d. <b>Hard Rubber</b> .....	0.75	1.35	2.00	3.10	5.20

## Stand Developer.



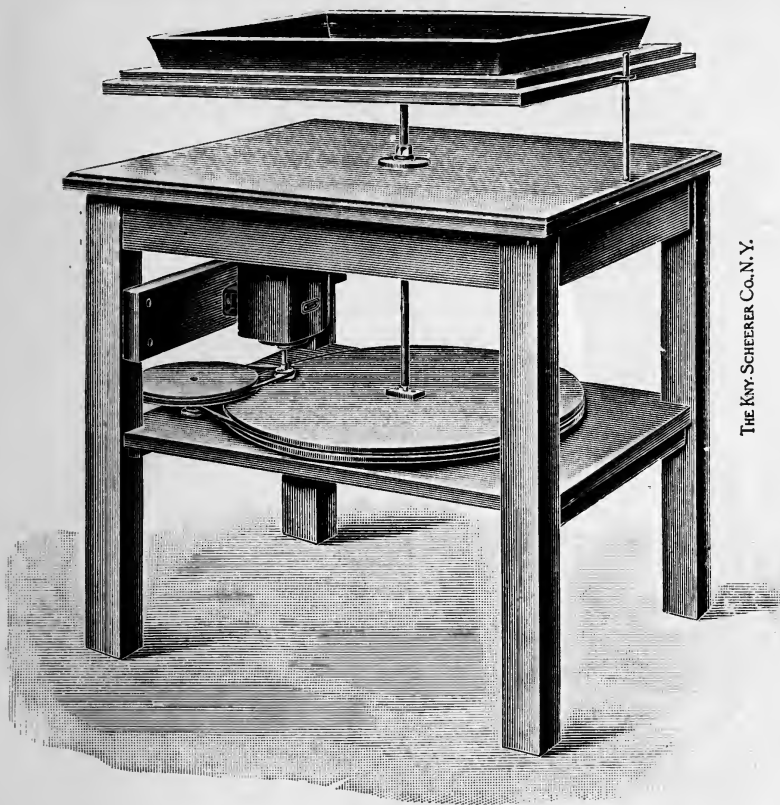
THE KNY-SCHEERER CO., N. Y.

G/..6181/82

These developers are constructed of zinc and mounted into a hardwood light proof wood box. Two plates may be developed at the same time. Stand development with glycin developer gives best possible results, and where a lot of X-ray work is to be performed saves considerable time. The plates are placed into the receptacle vertically, and after closing the cover are permitted to rest in the developer from 25 to 40 minutes without further manipulation. A small stopcock attached to the lower part of the tank facilitates the easy removal of the fluid.

G/..6181 **Stand Developer** size 1 for plates up to and inclusive size 10 x 12 fitted  
 Code—NUTZ. with double plate holder ..... **\$10.00**  
 G/..6182 The same as above size 2 for plates up to and inclusive size 14 x 17.... **13.50**  
 Code—NUVEL.

(We can supply an alarm clock which indicates the proper time of development,—see G/ No. 2.)



THE KNY-SCHIEERER CO. N. Y.

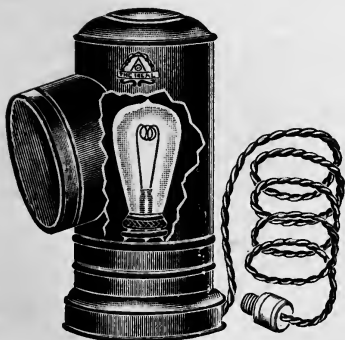
### Titubator.

The development, especially of larger plates requires considerable time, and a constant rocking of the tray is inconvenient and tiresome. The titubator, which consists of a rocking device actuated by motive power, is a labor saver, as it is merely necessary to place the tray with solution and plate to be developed into the solution in a dark room, and to cover the tray with the provided light proof hood. Developing for some minutes, the room can again be darkened and the progress of development ascertained.

G/..6186

G/..6186 **Titubator** for trays and plates up to and including size 14 x 17", with  
*Code MEIBE* light proof hood ..... \$62.50

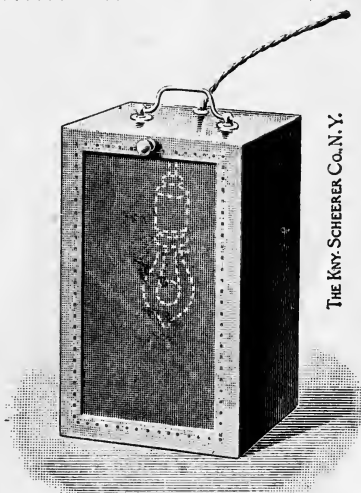
### Dark Room Lamps.



G/..6188

G/..6188 **"Ideal" Ruby Lamp** complete with electric connections with orange,  
*Code MEIER* ruby and ground glass ..... \$2.50

G/..6189 **Dark Lamp** for electric light, mounted into wooden case, provided with 1  
*Code MEIGA* incandescent lamp 6 feet of connecting cord, with contact plug. The  
 window is covered with a ruby cloth, and can be detached when white  
 light is required. .... 6.00



THE KNY-SCHIEERER CO. N. Y.

G/..6189

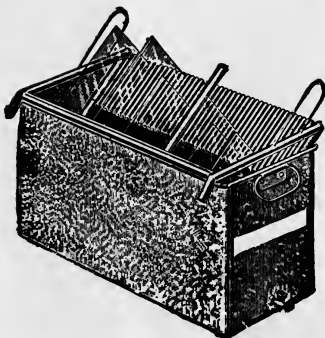
**Laboratory Table.**



THE KNY-SCHEERER CO., N. Y.

G/. .6201

G/. .6201 **Laboratory Table**,  
Code *NYLGA* for photographic  
work, with shelf  
for holding all  
sizes photographic  
plates and dishes,  
bottles, funnels,  
measuring  
glasses, lamps,  
etc. The table  
top is covered with  
linoleum.....\$33.00



**The Ingento Plate Washer.**

The ingento washing boxes will wash at one time any size negatives smaller than the largest size for which they are made. The cuts fully illustrate the method by which this is accomplished.

It will also be seen that the inside rack is tilted, so that it is impossible for the plates to be disturbed during the operation of washing. The water enters the box through two long tubes, which extend the full length of the box.

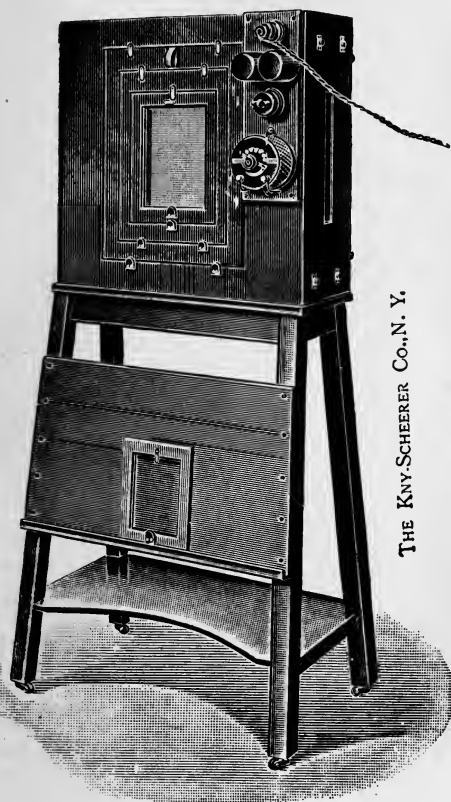
G/. .6203-5

**Prices.**

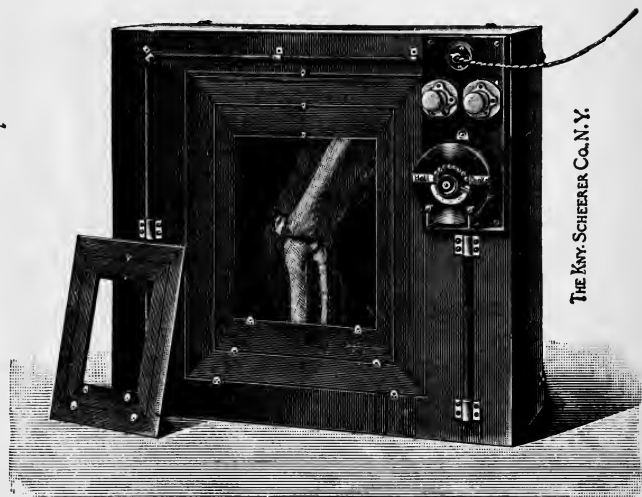
G/. .6203 No. 4. For 30 plates 8 x 10 or smaller..... \$4.50  
Code *NIVEL*

G/. .6205 No. 5. For 30 plates 11 x 14 or smaller... 6.00  
Code *NIVOS*

## Illuminating Boxes for Photographic Plates.



G/.6217



G/.6216

This illuminating box is equally well suited for examinations with day or electric light. The front part of the case is provided with a square opening into which can be placed different insertions suitable for various sizes of photographic plates. Behind this opening, covering the same entirely, a dull ground glass is placed for the observation with direct light reflected from the white enameled walls which is projected onto the glass plate. The illumination of the plate, also

the heat radiating from the lamps thereby becomes very uniform and the temperature of the dull glass plate is kept within such limits that even wet photographic plates can be examined.

The frames fitting the box are constructed to allow the length of the plates to be examined in either the horizontal or vertical position.

The brilliancy of the electric lights is controlled by a suitable resistance. If the illuminating box is to be used with daylight the rear of the box is removable.

G/.6216 **Illuminating Box** as described, completely wired to mount onto the wall. \$45.00  
Code *PACH*

G/.6217 **Illuminating Box** as described, completely wired, mounted on wood  
Code *PACER* stand with rollers ..... 57.00

## Negative Printing Frames with Hinged Back and Dressed Celluloid Tablet for Recording Memoranda.

Inches	5 x 7	8 x 10	11 x 14	14 x 17	16 x 20
	\$0.50	\$0.75	\$1.80	\$2.75	\$3.50

## Printing Frames for X-ray Pictures, Producing Plastic Effect.

G/..6231	<b>Printing Frame for Plastic Effect X-ray Pictures</b> , made entirely of metal, for plate of 8 x 10" .....	\$15.00
Code PAEDE		
G/..6231a	<b>Insertion</b> for this printing frame, for plates of 5 x 7" .....	2.50
Code PAEUM		
G/..6232	<b>Printing Frame</b> like 6231 for plates of 10 x 12" .....	22.00
Code PAFFA		
G/..6232a	<b>Insertion</b> thereto, for plates of 8 x 10" .....	3.00
Code PAFIV		
G/..6232b	<b>Insertion</b> thereto, for plates of 5 x 7" .....	4.00
Code PAGAC		
G/..6233	<b>Printing Frame</b> similar to 6231 for plates of 16 x 20" .....	60.00
Code PAGIN		
G/..6233a	<b>Insertion</b> thereto, for plates of 11 x 14" .....	5.00
Code PAGOD		
G/..6233b	<b>Insertion</b> for plates of 10 x 12" .....	6.00
Code PAGUR		

This frame allows of producing in a simple manner plastic X-ray pictures, the method being more fully described in our pamphlet, "Practical Hints on X-ray Photography."

## Graduates for Mixing Solutions.

Graduates, tumbler form, with lip, graduated in ounces and metric system.

<b>a. Graduated in Ounces.</b>		<b>b. Metric System.</b>	<b>c. Combined Ounces and Metric.</b>
4 ounce each .....	\$0.30	125 c.c.....	\$0.35
16 " " .....	.75	500 c.c.....	.85
32 " " .....	1.40	1000 c.c.....	1.50
<b>Glass Stirring Rods</b> , each .....			\$0.15
<b>Glass Funnel</b> , regular style, with oblique tip.		<b>Funnels</b> , white steel porcelain, with handle.	
Diameter, 5" .....	\$0.25	Diameter, 5½" .....	\$0.55
" 6" .....	.30	" 7" .....	.90
		" 8" .....	1.00
<b>Drop Bottle</b> , for conveniently stocking bromide of potassium solution, etc.			
2 ounce, clear glass .....			\$0.25

## Negative Drying Racks.

No. 1. A strong, well-built rack of large size to hold 42 negatives, and to accommodate the largest sizes as well as the smaller ones. Price .....	\$1.25
No. 3. For small size negatives up to 8 x 10, made up in the plain wood, without finish. Price .....	.50

# X-RAY APPARATUS—Equipment for Photographic Dark Room.

## Photographic Dark Room Equipment for the Negative Process.

G/.6234 Code PAILE

1 Electric Ruby Lamp with 8 c. p. light.....		\$2.75
2 Porcelain Lined Trays for 8 x 10" plates.....	\$1.25	2.50
2 " " " for 11 x 14" plates.....	2.40	4.80
1 Fibre Hypo Tray for 8 x 10".....		1.00
1 " " " for 12½ x 16".....		2.00
1 Graduate 16 oz. equals 500 grammes.....		1.00
1 " 4 oz. equals 120 grammes.....		.50
1 Fluted Glass Funnel ½ pt.....		.20
1 " " " 1 qt.....		.35
1 Negative Drying Rack No. 3.....		.50
2 oz. Metol .....		1.50
½ lb. Hydrochinone .....		.75
5 lbs. Sod. Sulphite.....		.45
5 lbs. Sod. Carbonate.....		.35
¼ lb. Bromide of Potassium .....		.20
½ liter Rodinal, ready for use.....		2.50
10 lbs. Hypo.....		.50
1 lb. Acetic Acid .....		.20
1 oz. Ortol .....		.75
1 oz. Glycin .....		.75
1 doz. Schleussner X-ray Plates 5 x 7" with envelopes .....		1.40
2 " " " 8 x 10" " " .....		3.50
1 " " " 11 x 14" " " .....		7.20
1 Plate Washer for all sizes up to and including 11 x 14" .....		6.00
	Total	\$41.95

## For the Positive Process.

G/.6235 Code PAIAN

1	Printing Frame	5 x 7"	.....	\$0.50
1	"	"	6½ x 8½ .....	.60
1	"	"	8 x 10" .....	.75
1	"	"	11 x 14" .....	1.80
2	doz. Developing Papers	5 x 7"	.....	.60
2	"	"	6½ x 8½" .....	1.00
6	"	"	8 x 10" .....	3.50
2	"	"	11 x 14" .....	2.70
1	Studio Trimmer	with 10" knife	.....	3.00
1	Roller	12"	.....	1.50
1	Paste Brush	2"	.....	.35
6	oz. Higgins Photo Mounter		.....	.25
1	doz. Card Mounts	5 x 7"	.....	.20
1	"	"	6½ x 8½" .....	.25
1	"	"	8 x 10" .....	.30
1	"	"	11 x 14" .....	.35
Total				\$17.65

## For Reducing Prints for Special Records and Photography of Patient.

G/.6236 Code PAIER

<b>1 Camera No. 9 Size 6½ x 8½ with all Latest Improvements</b> fitted with Autic Automatic Shutter and Rapid Convertible three focus lens F:8. Its combination may be used separately or together with our double plate holder in solid leather carrying case .....	\$58.00
<b>1 Tripod</b> for the same .....	3.00
<b>1 Focusing Cloth</b> .....	.50
	<hr/>
	Total, \$61.50

## SUGGESTIONS FOR X-RAY INSTALLATIONS.

### For Direct Current.

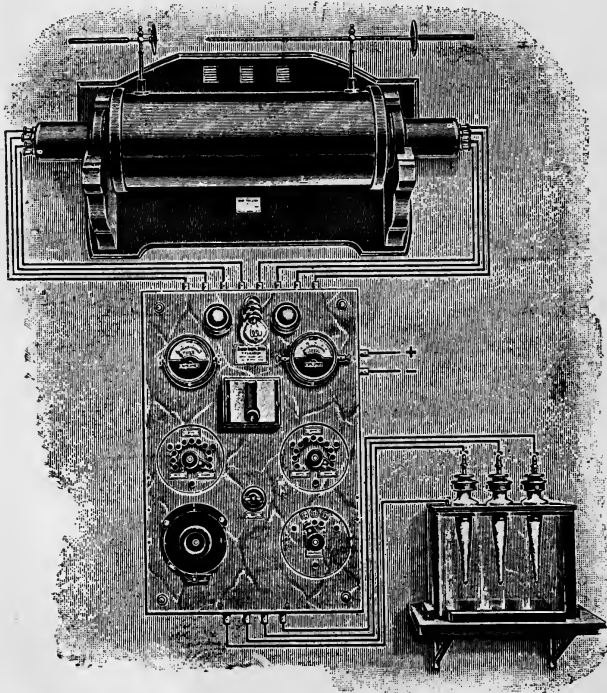
To facilitate selection of an X-ray installation we herewith recommend to prospective purchasers a few combinations, and, in doing so, we confine ourselves to the main component parts of the equipment only, viz., Induction Coil, Regulating Device and Interrupter.

X-ray tubes have been treated as articles of consumption. By listing the best and well-known Interrupter types, Induction Coils of various sizes with or without variable inductance and reliable Regulating Devices, every requirement as to capacity, reliable working and convenience of manipulation has been considered.

The designs mentioned under types A are intended for mounting against the wall, and should be resorted to, when floor space in the X-ray room is limited.

Further requirements as regards arrangement of the same apparatus are met by designs mentioned under types B, C and of the special types "Rekord", Army, Navy, etc.

We also refer to the assortments of accessories under No. G/6350-53 and to the photographic outfits under No. G/6334-35.



G/6301. Combination C

G/6301 X-ray Equipment Type A. All parts furnished separate for mounting to the Code PIPIZ wall or in any other desired manner.

# X-RAY APPARATUS—X-Ray Equipments.

## Specification of Type A

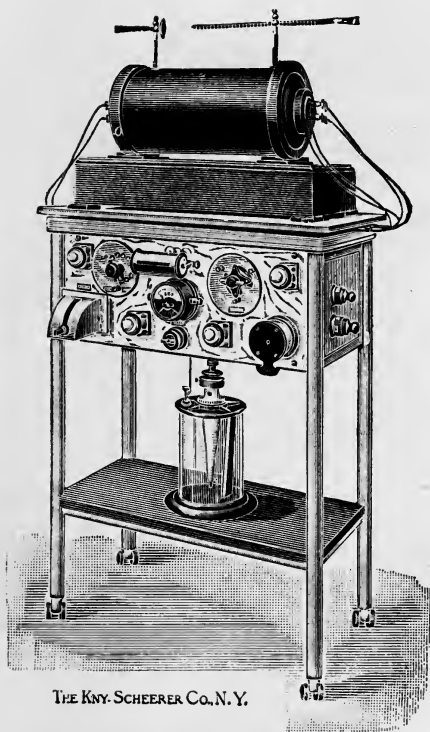
(G/6301, Code PIPIZ)

Combination	I Code PINOW		II Code PITCH		III Code PINIR		IV Code PITAN	
Interrupter	Sliding Contact		Electrolytic with one Anode		Electrolytic with 3 Anodes		Sliding Contact and Electrolytic with 3 Anodes	
+110 Volts	Cat. No.	Price	Cat. No.	Price	Cat. No.	Price	Cat. No.	Price
Switchboard	G/5560	\$ 90 00	G/5570	\$ 88 00	G/5572	\$115 00	G/5582	\$150 00
Interrupter	G/5518	50 00	G/5536	23 00	G/5538	60 00	G/5518	50 00
"	....	....	....	....	....	....	G/5538	60 00
Connecting Cords	....	2 50	....	2 00	....	5 00	....	5 00
Coil 10 inch	G/5460	120 00	G/5410	115 00	G/5410	115 00	G/5460	120 00
Variable Inductaves	....	....	....	....	c	15 00	c	15 00

Code TERMINAL	Total	\$ 262 50	*\$228 00	\$ 310 00	\$ 400 00
AT means with coil of 12"	"	*\$12 50	* 278 00	360 00	450 00
ET " " " 16"	"	*\$92 50		*435 00	*530 00
IT " " " 18"	"	417 50		*470 00	*565 00
OT " " " 20"	"	467 50			*615 00
† Additional for Apparatus operating from 125 to 230 volts				Extra	15 00
Wall Bracket for Induction Coil				"	7 50

NOTE. Specifications of type A includes 10" coil, for larger coils use code termination, for instance: for combination II with 16" coil it reads: PITCHET or combination IV with 18" coil: PITANIT.

The Apparatus with prefixed asterisk are specially recommended.



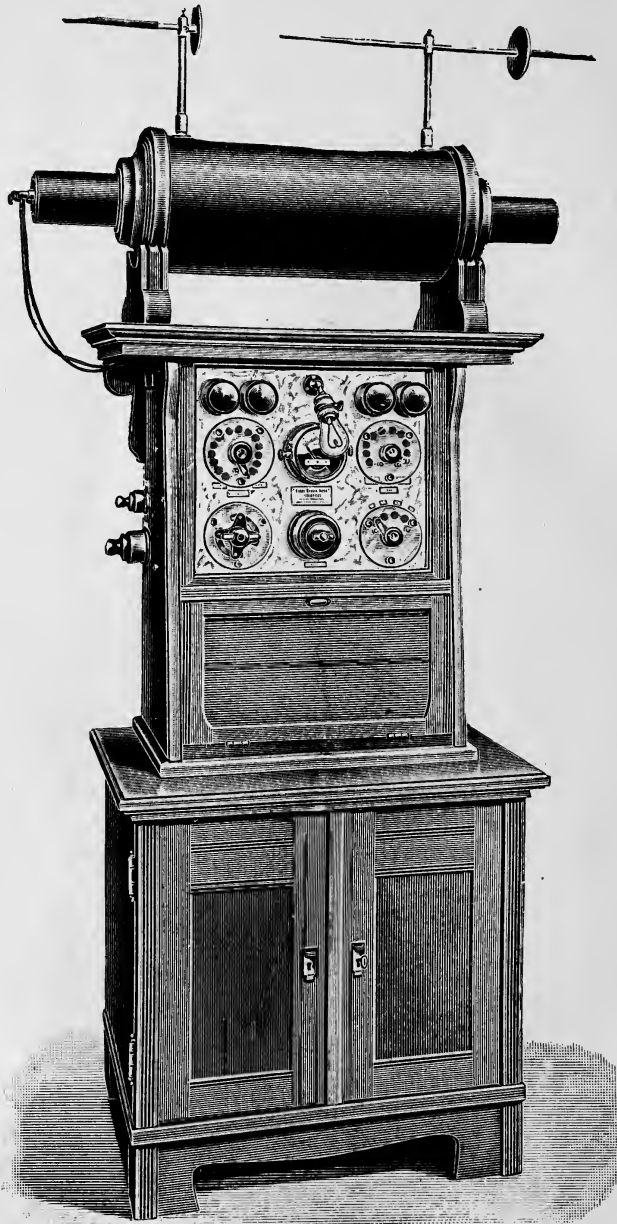
THE KNY-SCHEERER CO., N. Y.

G/..6302. Combination III.

G/..6302 X-ray Equipment Type B. Induction Coil, Regulating Device and Code PILGER Interrupter mounted on table.

Any combination listed under Type A can be furnished mounted on table, representing thereby Type B, for \$40.00 extra.

**THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.**



G/..6303. Combination IV.

G/..6303 X-ray Equipment Type C. Induction Coil, Regulating Device and Interrupter Code *PINIGE* mounted in Cabinet Form.

Any combination listed under Type A can be furnished mounted in Cabinet Form, representing thereby Type B, for \$90.00 extra.

---

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

---

## *X-RAY APPARATUS—The “Rekord” X-Ray Apparatus.*

---

### The “Rekord” X-ray Apparatus.



The latest type of THE KNY-SCHEERER Co's X-ray Apparatus specially designed for the use of the general practitioner and smaller hospitals excels by a standard of efficiency of its component parts and their proper interrelation, a result of years of experience and experiments with their predecessors.

A high intensity, 10" coil with condensor is mounted on a hardwood cabinet of a pleasing design.

It possesses a heavy, carefully laminated magnet core and a secondary winding of low inductance. It delivers a powerful discharge suitable for rapid radiographic and radioscopic work on all parts of the body. A parallel spark gap is provided for, which guards the tube against puncturing and also enables the operator to determine approximately the vacuum.

---

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

---

## *X-RAY APPARATUS—The “Rekord” X-Ray Apparatus.*

---

The “Rekord” interrupter, as described under B/..5526-29, is placed on a bracket inside of the cabinet in a position for convenient adjustment of the duration of contact, while a small switchboard underneath serves for the adjustment of the condensor.

The regulating and measuring devices for the main circuit and for the motor of the interrupter are arranged in the form of a switchboard, mounted with the necessary resistances to a nickel-plated table on rubber-tired wheels. Upon the switchboard are mounted rheostats and switches, a precision amperemeter and an incandescent lamp for the general illumination.

The separate arrangement of the regulating devices allows also of the convenient control of the X-ray light from the examining table.

The whole apparatus is self-contained, and can be connected to the main line by a flexible cord and plug. It can be readily assembled without using the wall for the support of any of the parts. The consumption of electric energy is about 4 to 5 amperes, which, on account of the economical operation of the “Rekord” interrupter, is sufficient for a very strong unidirectional secondary discharge. Owing to the high number of revolutions and the perfect contact and interruption, the light on the fluorescent screen is very steady.

The prices of the complete “Rekord” apparatus, including one “Monopole” tube, regulating table mounted on rollers, tubestand on casters with protective case and cord adjusters are for:

G/..6321	110 volts direct current .....	\$400.00
<i>Code PISTUR</i>		
G/..6322	220 “ “ “ .....	410.00
<i>Code PISUE</i>		
G/..6323	32 “ “ “ (without storage battery) .....	380.00
<i>Code PITGA</i>		
G/..5611	Storage battery of 10 cells of 40 ampere hours each .....	76.00
<i>Code MAXAG</i>		
G/..6324	Alternating current 110 volts, 60 cycles with Wehnelt interrupter and valve cell .....	450.00
<i>Code PIXIS</i>		
G/..6325	The same for 200 to 250 volts, 60 cycles .....	465.00
<i>Code PIZET</i>		



## X-ray Equipments for Instantaneous and Tele-X-ray Photography.

**a. G/..6307 For Instantaneous and Tele-X-ray Photography only; Direct Current of 110-  
Code PINDI 225 Volts, consisting of:**

G/..5470	Induction Coil for 20" spark length, with special winding for instantaneous photography .....	\$325.00
G/..5540	Wehnelt Electrolytic Interrupter with 3 parallel connected, simultaneous-ly adjustable anodes .....	75.00
G/..5585	Switchboard with binding posts, and special circuit breaker for instantaneous photography .....	60.00
		Total, \$460.00

**b. G/..6308 For Instantaneous and Tele-X-ray Photography. combined with Accessories for  
Code PINKU normal exposures, to connect with the Direct Current of 110-1225 Volts,  
consisting of:**

G/..5470	Induction Coil for 20" spark length, with special winding and quadruple variable inductance .....	\$350.00
G/..5541	Wehnelt Electrolytic interrupter, same as G/5540, but with a fourth anode for time exposures .....	90.00
G/..5572	Marble Switchboard with selector switch for the variable inductance of the inductor and rheostat lever for the control of the primary current (Modif. G/5592) .....	185.00
G/..5585	Switchboard with binding posts, and special circuit breaker for instantaneous photography .....	60.00
		Total, \$685.00

### MODIFICATIONS.

G/..6309 Code PINNH	To operate from the Direct Current of 125-250 Volts, additional.....	\$22.50
G/..6310 Code PILCH	To operate from Alternating Current up to 150 Volts, including a Valve Cell No. G/5627, additional .....	15.00
G/..6311 Code PIEMB	To operate from an Alternating Current of 125-250 Volts, including a Valve Cell No. G/5627 and a step-down Transformer, additional....	103.20
G/..6312 Code PICM	To add an automatic Timeswitch to Switchboard G/5585, additional....	45.00

*NOTE: Attention is called to Compilation of Accessories for Instantaneous and Tele-X-ray Photography under No. 5821-22.*

# *X-RAY APPARATUS—X-Ray Equipments.*

## **SUGGESTIONS FOR X-RAY INSTALLATIONS.**

### **For Alternating Current.**

Where only alternating current is available, the X-ray equipment can either be operated on the same directly or the alternating current is first transformed into direct current by means of a motor generator.

The consumption of X-ray tubes, platinum contacts at the interrupter, etc., is necessarily less with a direct current.

#### **G/..6305 X-Ray Equipment with 12" Coil and Valve Cell,**

*Code PIMPL* consisting of:

G/..5490	Special Alternating Current Induction Coil.....	\$130.00
G/..5535	Wehnelt Electrolytic Interrupter with 1 platinum iridium anode .....	20.00
G/..5570	Switchboard with Regulating Device and Amperemeter for 120 Volts..	88.00
G/..5625	Electrolytic Valve Cell.....	15.00
G/..5770	Series Spark Cap .....	5.25

Total, \$258.25

#### **G/..6306 X-ray Equipment with 16" Coil and Valve Cell,**

*Code PINCH* consisting of:

G/..5493	Special Alternating Current Induction Coil .....	\$280.00
	Quadruple variable inductance.....	15.00
G/..5538	Electrolytic Interrupter with 3 platinum iridium anodes .....	60.00
G/..5572	Switchboard with Regulating Device and Amperemeter .....	115.00
G/..5625	Electrolytic Valve Cell .....	15.00
G/..5770	Series Spark Cap .....	5.25

Total, \$380.25

For tensions of 150-230 volts a Transformer is required at an extra price of..... \$65.00

To mount the same in accordance with the arrangement enumerated under types B and C, the corresponding price, as stated under No. 6302-03 will be added.

### **c. Equipment with Motor Generator.**

The cost of this class of equipment is calculated by adding the price of one of the direct current equipments, mentioned under No. 6301-6304 to that of one of the generator outfits G/5623-5626. The 2 H. P. outfit G/5623 is sufficient to operate the inductor with mechanical interrupter, while the 4 H. P. outfit G/5624 is required when an electrolytic interrupter is employed.

Special detailed estimates for the above as well as for complete outfits with isolated electric plants, gasoline-dynamo, or dynamo alone, will be furnished upon request. Requests should be accompanied by statements of available current supply, voltage if direct and voltage with amount of periods per second if an alternating current, or of available horse power, if any, also of the desired type of interrupter, so as to enable us to select the most suitable outfit for each individual case.

*Kindly use the Enclosed Information Blank.*

# THE KNY-SCHEERER Co.

289 NINTH AVENUE,

NEW YORK CITY.

GENTLEMEN: —

I am interested in X-ray Apparatus and desire to be informed regarding cost of a complete equipment.

The electric street current available is,

- a) Direct current ..... Volts  
b) Alternating current ..... Volts ..... Cycles

- ☐ 1) I desire a complete equipment consisting of:  
Induction coil of ..... inch spark complete with Mechanical Interrupter. Electrolytic Interrupter Mechanic and Electrolytic Interrupter.

Accessories: .....

.....

.....

.....

- ☐ 2) I desire to receive a quotation from you for an equipment suitable for the general medical practitioner not exceeding in price \$.....

- ☐ 3) I desire to receive suggestions for an up-to-date outfit for Diagnostic and Therapeutic purposes. Highest efficiency to be a condition.

- ☐ 4) I desire also a price for a High Frequency apparatus in connection with the X-ray equipment.

Special Remarks .....

.....

.....

NAME (plainly written) .....

STREET ADDRESS .....

CITY ..... STATE .....

N. B. Please mark the equipment as you may be interested in by crossing the circle prefixed.

# FOR X-RAY

## FOR X-RAY

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

### For Alternating Current

# THE KNY-SCHEERER Co.

289 NINTH AVENUE,

NEW YORK CITY.

GENTLEMEN:—

I am interested in X-ray Apparatus and desire to be informed regarding cost of a complete equipment.

The electric street current available is,

a) Direct current .....Volts

b) Alternating current..... Volts ..... Cycles

☐ 1) I desire a complete equipment consisting of:

Induction coil of .....inch spark complete with Mechanical Interrupter. Electrolytic Interrupter Mechanic and Electrolytic Interrupter.

Accessorries: .....

.....

.....

.....

☐ 2) I desire to receive a quotation from you for an equipment suitable for the general medical practitioner not exceeding in price \$.....

☐ 3) I desire to receive suggestions for an up-to-date outfit for Diagnostic and Therapeutic purposes. Highest efficiency to be a condition.

☐ 4) I desire also a price for a High Frequency apparatus in connection with the X-ray equipment.

Special Remarks .....

.....

.....

NAME (plainly written) .....

STREET ADDRESS .....

CITY ..... STATE .....

N. B. Please mark the equipment as you may be interested in by crossing the circle prefixed.

1940

1941

1942

1943

1944

1945

1946

1947

1948

1949

1950

1951

1952

1953

1954

1955

1956

1957

1958

1959

1960

1961

1962

1963

1964

1965

1966

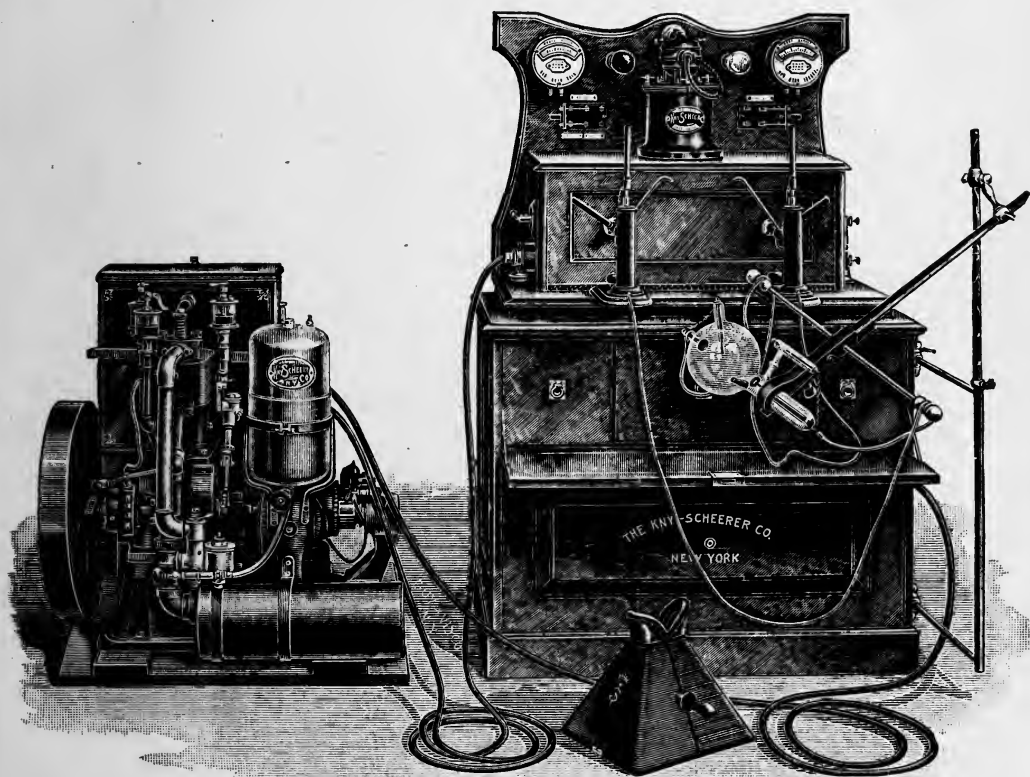
1967

1968

1969

## **X-ray Outfit with Gasoline Motor Generator.**

Very often it is found impracticable or impossible to obtain commercial electric service in many localities, and to meet this condition, we have devised outfits such as shown in the illustration; comprising a gasoline engine directly connected to a slow speed multi-polar dynamo, and cabinet equipped with a complete X-ray set, consisting of our standard sectional wound induction coil, centrifugal mercury jet interrupter, high tension magnetic interrupter, standard volt meter and ammeter, inverse current controller, primary controller, pole changing interrupter switches, adjustable tube holder, tubes, cords and fluoroscope. The articles enumerated are the same as furnished with our regular hospital equipment and are of the very best mechanical and scientific construction; none but perfect material entering into the production of same, under the most careful supervision.



The engine is very simple and substantial in construction, and starts without the difficulty usually experienced with gasoline motors. It is very economical in operation, consuming one quart of gasoline per hour.

The illustration shows our 14 in. outfit operated by a 1 kilowatt generator and connected thereto by means of flexible cables. This outfit will give a heavy continuous high frequency discharge of 14 in.

The current output of the particular generator set shown in the illustration is 10 amperes at 110 volts, E. M. F., and may be used for a variety of purposes, such as lighting, charging of storage batteries, operation of galvanic, furadic and cautery apparatus.

## *X-RAY APPARATUS—Special Equipment.*

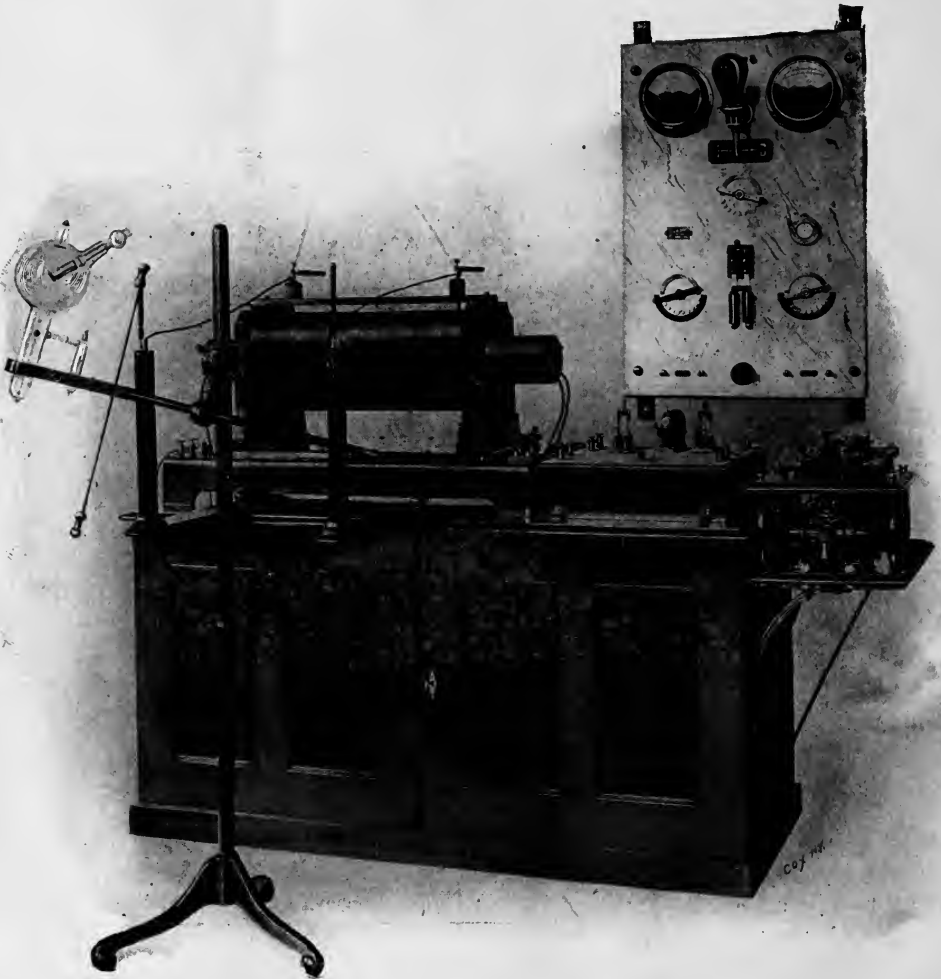
---

The X-ray cabinet is so constructed, that the entire mechanism may be placed within the case, including tubes, and fluoroscope and the tube holder folded close to the side, as shown in the illustration and then set within a substantially constructed shipping case.

The engine being self-contained is packed in the same manner, and may be readily transported and set up, it merely being necessary to bolt the engine to a firm foundation before starting.

Prices of outfits of various capacities will be furnished upon application. Specify the length of spark required, and if the generator is to be used for any other purpose than X-ray work, state what for, and whether gas or gasoline is to be used.

(Specifications on Application).



SPECIAL X-RAY OUTFIT, MADE FOR THE MEDICAL DEPARTMENT, U. S. ARMY.

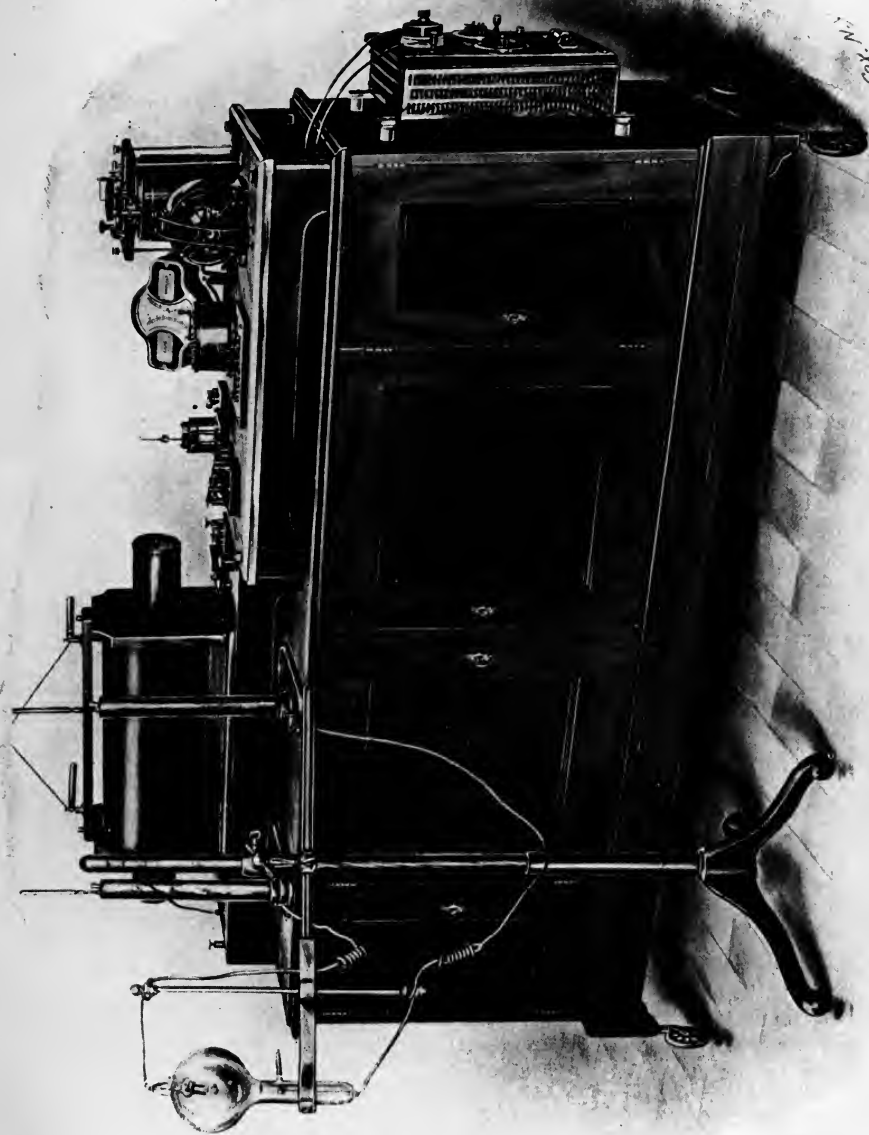
(Specifications on Application.)

---

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

## X-RAY APPARATUS—*Special Equipment.*

---



(Specifications on Application.)

SPECIAL X-RAY OUTFIT, MADE FOR THE DEPARTMENT OF MEDICINE AND SURGERY, U. S. NAVY. DESIGNED BY C. F. STOKES, SURGEON, U. S. N.

---

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

## *X-RAY APPARATUS—Accessories for X-Ray Laboratories.*

### **Assortments of Accessories for X-ray Laboratories.**

#### **I.**

G/..6350. Code *PAPY*.

Consisting of

G/..5736 X-ray tube .....	\$25.00
G/..5708 Floor tube stand.....	12.00
G/..5796 Fluorescent screw $7\frac{1}{2} \times 9\frac{1}{2}$ " .....	18.00
Leadglass plate and protective shield for same .....	4.00
G/..6001 Plate holder for X-ray plates up to $10 \times 12$ ".....	6.00
G/..5830 Plain table for radiography with canvas top .....	23.00
	<b>\$88.00</b>
G/..6234-35 Equipment for photographic darkroom .....	59.60

Total, **\$147.60**

#### **II.**

G/..6351. Code *PARCI*.

Consisting of

G/..5753 X-ray tube .....	\$25.00
G/..5738 X-ray tube, water-cooled.....	45.00
G/..5764 High potential valve tube .....	16.50
G/..5797 Fluorescent screen $9\frac{1}{2} \times 12$ " .....	28.50
Leadglass plate and protective shield for same .....	4.50
G/..5806 diaphragm stand .....	50.00
G/..5831 X-ray table with detachable top, etc .....	50.00
G/..5971 Wall board for X-ray tubes .....	6.00
G/..6001 Plateholder for X-ray plates up to $10 \times 12$ ".....	6.00
G/..6002 Plateholder for X-ray plates up to $14 \times 17$ " .....	6.00
G/..5987 Exposure clock .....	3.75
G/..5929 Milliamperemeter on bracket .....	18.75
	<b>\$260.00</b>
G/..6233-34 Equipment for photographic darkroom .....	59.60

Total, **\$319.60**

#### **III.**

G/..6352. Code *PAREM*.

Consisting of

G/..5736 X-ray tube .....	\$25.00
G/..5753 X-ray tube .....	25.00
G/..5738 X-ray tube, watercooled.....	45.00
G/..5764 High potential valvetube.....	16.50
G/..5797 Fluorescent screen $9\frac{1}{2} \times 12$ " .....	28.50
Leadglass plate and protective shield for same .....	4.50
G/..5810 Universal diaphragm stand .....	125.00
G/..5831 X-ray table with detachable top, etc. ....	50.00
G/..5929 Milliamperemeter mounted on insulated bracket .....	18.75
G/..5971 Wallboard for X-ray tubes .....	6.00
G/..5987 Exposure alarm clock.....	3.75
G/..6001 Plate holder for X-ray plates up to $10 \times 12$ " .....	6.00
G/..6002 Plate holder for X-ray plates up to $14 \times 17$ .....	9.00
	<b>\$363.00</b>
G/..6234-35 Equipment for photographic darkroom .....	59.60

Total, **\$422.66**

**THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.**

# X-RAY APPARATUS—Accessories for X-Ray Laboratories.

## IV.

G/..6354 Code *PARGO*.

Consisting of:

G/..5736	X-ray tube .....	\$25.00
G/..5753	X-ray tube .....	25.00
G/..5738	X-ray tube, water cooled.....	45.00
G/..5764	High potential valve tube .....	16.50
G/..5798	Fluorescent screen, 12 x 16".....	45.00
	Leadglass plate and protective hand shield .....	6.50
G/..5811	Universal diaphragm stand .....	200.00
G/..5831	X-ray table with detachable top, etc. ....	50.00
G/..5929	Milliamperemeter mounted on bracket .....	18.75
G/..5971	Wallboard for X-ray tubes.....	6.00
G/..5987	Exposure clock .....	3.75
G/..6216	Illuminating box .....	45.00
G/..6001	Plateholder for X-ray plates up to 10 x 12" .....	6.00
G/..6002	Plateholder for X-ray plates up to 14 x 17" .....	9.00
G/..5783	Three reserve tubeholders, per \$2.00.....	6.00

\$507.50

G/..6234-35 Equipment for fotogr. darkroom ..... 69.60

Total, \$577.10

G/..6353 Code *PARFU*.

Consisting of:

G/..5736	X-ray tube .....	\$25.00
G/..5753	X-ray tube .....	25.00
G/..5738	X-ray tube, watercooled .....	45.00
G/..5764	High potential valve tube.....	16.50
G/..5798	Fluorescent screen 12 x 16"..... 16" .....	45.00
	Leadglass plate and protective shields for same .....	6.50
G/..5812	Compression diaphragm .....	140.00
G/..5831	X-ray table with detachable top, etc. ....	50.00
G/..5905	Improved orthodiagraph .....	250.00
G/..5906	Tilting table .....	50.00
G/..5929	Milliamperemeter mounted on bracket .....	18.75
G/..5971	Wallboard for X-ray tubes .....	6.00
G/..5987	Exposure clock .....	3.75
G/..6216	Illuminating box .....	45.00
G/..6001	Plate holder for X-ray plates up to 10 x 12" .....	6.00
G/..6002	Plate holder for X-ray plates up to 14 x 17" .....	9.00

\$741.50

G/..6234-35 Equipment for fotogr. darkroom .....\$69.60

G/..6186 Titubator ..... 62.50 122.10

Total, \$863.60

THE KNY-SCHEERER COMPANY'S LABEL GUARANTEES HIGHEST STANDARD.

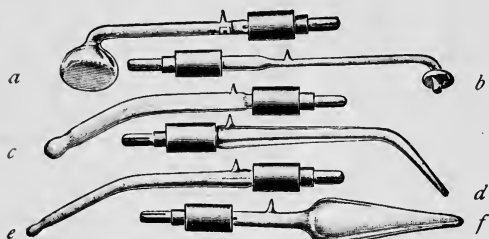
## Abridged List of Apparatus and Accessories

—FOR—

### ARSONVALISATION AND FULGURATION.

G/..6351 **Small apparatus** for the production of high frequency currents; a combination of the d'Arsonval transformer and the Oudin resonator, including spark gap with muffler..... \$60.00  
Code PLATZ

G/..6352 Similar apparatus, arranged on a table, with fine adjustment of the resonator for obtaining perfect resonance, and consequently the best discharge. While in the former design the regulation of the primary



G/..6370 a-f.

circuit is effected by moving the contact directly from one turn to the other, a comparatively coarse adjustment, the drum of this apparatus revolves around a vertical axis and allows of perfect tuning by adjusting the same within a fraction of a turn. A crank adjustment is provided for this purpose. The muffler of the spark gap consists of a glass receptacle, which can be taken apart conveniently. It is a very efficient means for suppressing the noise, and with the use of chemicals, the ozone and moisture generated by the discharge can be absorbed, insuring a constant working at highest efficiency .....

115.00

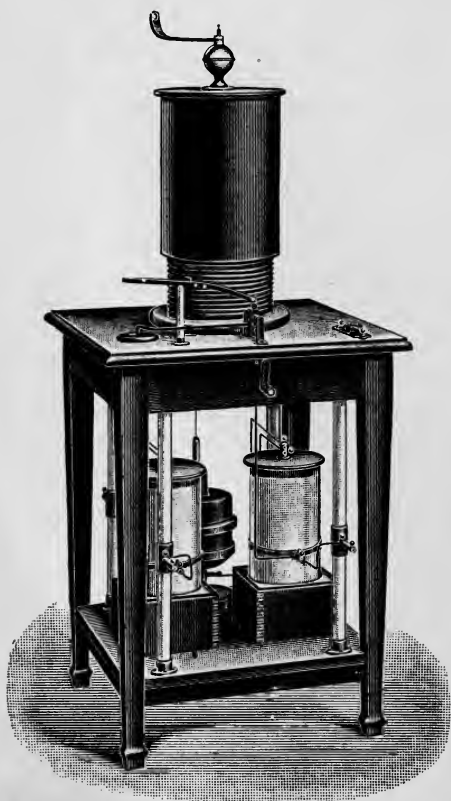
G/..6353 The same with larger resonator, suitable for all requirements of arsonvalisation and fulguration. (See cut on the outside of the cover.).. 135.00  
Code PLETH

G/..6354 **Resonator with stand** according to Dr. Guilleminot, consisting of a flat spiral which can be vertically adjusted... 75.00  
Code PLIUR

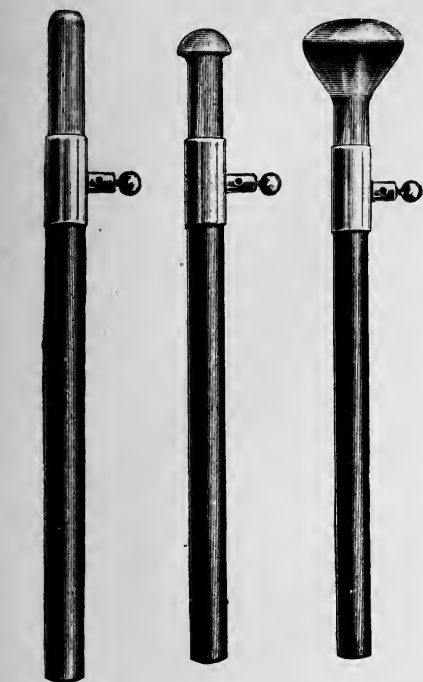
G/..6355 **Large Solenoid for Auto-conduction**, with the patient in a sitting position ..... 65.00  
Code PLOTF

G/..6356 The same, with patient in recumbent position ... 150.00  
Code PLUKH

G/..6360 **Oudins Condenser Electrode** for local treatment. The one surface of the condenser is formed by a metal rod attached to a hard rubber handle, while the other surface consists of the part under treatment. A glass tube of 10 in. in diameter, sealed into a brass-threaded fitting forms the insulator to be screwed onto the handle G/..6369 ..... 4.00  
Code PNIGA



G/..6352



G/..6361

G/..6362

G/..6363



G/..6372



G/..6373



G/..6374

- G/..6361 The same, with a glass tube of 20 in. in diameter and an interior graphite coating, firmly attached to the handle ..... \$2.50  
*Code PLAUD*
- G/..6362 The same with the glass end of semi-spherical shape of 30 in. in diameter. .... 3.00  
*Code PLEIS*
- G/..6363 The same of 55 in. in diameter.... 3.50  
*Code PLEUV*
- G/..6364 The same of hard rubber with metal cover disc shaped..... 3.50  
*Code PLOCC*
- G/..6365 **Metal Brush** for the treatment of the skin ..... 1.50  
*Code PLONG*
- G/..6366 **Multiple brush electrode** for the treatment of the skin ..... 3.50  
*Code PLUMP*
- G/..6367 **Pointed Electrode** for treatment with concentrated spark discharges; with thread for attaching the handle ..... 1.25  
*Code PLAYB*
- G/..6368 **Bell shaped Electrode** ..... 1.50  
*Code PLEKT*
- G/..6369 **Handle of Hard Rubber** for the electrode G/..6364-68 ..... 3.00  
*Code PLIGH*
- G/..6370 **Vacuum Electrodes** for the treatment of (a) the skin, (b) the ear, (c) the rectum, (d) the nose, (e) the uterus, (f) the anus. Each. .... .75  
*Code PLOST*
- G/..6371 Hard rubber handle for above vacuum electrode ..... 1.50  
*Code PLUIK*
- G/..6372 **Electrode for Fulguration** the treatment of cancer ..... 2.50  
*Code PLUQU*
- G/..6373 The same with 3 needles of platinum-iridium ..... 5.50  
*Code PLECT*
- G/..6374 The same, in the form of a sound, with adjustable glass tube, to vary the length of the spark and hard rubber handle, with channels for the conduction of carbonic acid ..... 11.00  
*Code PLENG*

Our complete catalogue on High Frequency Apparatus, Section G, part 10, is under preparation, and will be mailed upon application, as soon as received from the printer.

# INDEX.

A	PAGE.
Alarm clock .....	48, 51
Alcohol lamp .....	50
Amperemeter .....	16
Army X-ray equipment.....	72
Automatic time switch.....	16
Auxiliary switchboards .....	16

B	PAGE.
Band compressor .....	37
Barium platino-cyanide screen.....	28
Benzin lamp .....	48
Bismuth pills .....	52
Bromosilver paper .....	56

C	PAGE.
Cabinet for X-ray equipment.....	18
Caldwell, Diaphragm interrupter.....	12
Camerastereoscopes .....	55
Centering device for tubes.....	26, 39
Chair for examination and treatment.....	39
Charts for radiograms.....	52
Chemicals .....	8
Coils, induction .....	8
Compression band .....	37
Compression Diaphragm.....	34
Connecting cords .....	50
Cryptoradiometer, Wehnelt's .....	45
Cryptosciascope .....	46

D	PAGE.
Dark-room lamps .....	59
Dark-room equipments .....	58
Developing trays.....	31
Diaphragm, stand for therapy.....	29
“ “ “ apparatus for therapy.....	34
“ “ “ compression .....	35
“ “ “ double, Groedel's .....	35
“ “ “ suspension .....	36
“ “ “ universal .....	32, 33
Double Diaphragm, Groedel's.....	35, 36
Drop bottle .....	62
Drying racks .....	62

E	PAGE.
Electric plants .....	20
Equipment for the dark-room.....	62, 63

F	PAGE.
Films .....	56
Fluorescent screens .....	28
Fluoroscopes .....	28
Focometer, Walters' .....	84

G	PAGE.
Gasoline engine .....	20
General remarks .....	6
Generators .....	20
Glass funnels .....	62
Graduates .....	62

H	PAGE.
Green and Bauer tubes .....	23
Groedel's double Diaphragm.....	35, 36
“ “ orthodiagraph.....	42, 43
Gundelach tubes .....	23

I	PAGE.
Hand stereoscope .....	55
High tension conductors.....	50
“ “ board .....	51

J	PAGE.
Illuminating boxes .....	61
Index, classified.....	2
“ “ alphabetical .....	78
Inductance, variable.....	8
Induction coils .....	6, 8
Intensifying screens .....	57
Interrupters, mechanical.....	9
“ “ Caldwell .....	12
“ “ electrolytic .....	11
“ “ mercury dip.....	10
“ “ platin .....	10
“ “ precision .....	10
“ “ Rekord .....	10
“ “ sliding contact.....	9
“ “ Wehnelt .....	11

K	PAGE.
Kienbock, quantimeter .....	47
Kryptoscope .....	28

L	PAGE.
Laboratory table .....	60
Lamp resistance .....	19
Lamps for the dark-room.....	59
Leadglass plates.....	28
“ “ shields .....	29
“ “ specula .....	29
Levy-Dorn Orthodiagraph .....	41
Light-proof paper .....	54
Lumiere X-ray plates .....	56

M	PAGE.
Measuring devices .....	44, 49
Metal shield for fluorescent screens.....	28
Milliamperemeter .....	45
Motorgenerator .....	20
Modifications of coils.....	6, 8
“ “ Diaphragm stands.....	35
“ “ switchboards .....	14, 15
Monopol tubes .....	22
Muffler for electrolytic interrupter.....	12
Muller X-ray tubes.....	21

N	PAGE.
Navy X-ray equipment.....	73
Negative drying racks.....	62

# X-RAY APPARATUS—Index

## O

	PAGE
Operating table .....	41
Orthodiagraph, Levy-Dorn.....	41
“ Groeel .....	42, 43
Orthodiagraph blank .....	43

## P

Paper celloidin .....	57
Paper, light-proof.....	54
“ bromsilver .....	56
Parallel bracket .....	37
Photographic equipment.....	63
“ camera .....	63
Plate holder.....	53
“ “ extra low.....	36
“ “ stereoscopic .....	54
Plate washer .....	60
Power plants .....	20
Pocket voltmeter .....	19
Protractor for localizing.....	40
Precision voltmeter.....	17
“ amperemeter .....	17
Preface .....	3
Prismenstereoscope .....	55
Printing frames .....	62
Protective plates of leadglass.....	40
“ apron .....	40
“ goggles .....	40
“ handles .....	40
“ mask .....	40
“ wall .....	43

## Q

Quantimeter, Kienbock's.....	47
------------------------------	----

## R

Radiogram charts .....	52
Radiometer .....	46
Regulating devices .....	13, 18
Rekord X-ray apparatus.....	67, 68
Rheostats .....	13
Rubber cover.....	31
“ cloth .....	40

## S

Schleussner X-ray plates.....	55
Shunt rheostats .....	16
Sources of electric current.....	19
Spark gaps .....	44, 24
Standard scale .....	46
Stand developer .....	58
Stereoscope for X-ray plates.....	54, 55
Stomach sound .....	52
Stop watch .....	51
Storage batteries .....	19
Suggestions for X-ray equipments.....	
Suspension Diaphragm .....	36
Switchboards .....	16
“ auxiliary.....	16

## T

	PAGE
Table for examination, etc.....	38
“ “ “ plain .....	38
Table, tilting .....	43
Terms .....	5
Test hand .....	46
Tilting table .....	43
Time switch, automatic.....	16
Timing devices .....	51
Titubator .....	59
Tube holder .....	25
Tube holder, self-centering.....	26, 27
Tube stands .....	25

## U

Universal Diaphragm.....	32, 33
--------------------------	--------

## V

Valve cells.....	19
“ tubes.....	24
Variable shunt rheostat.....	16
“ inductance.....	8
Voltmeter .....	16
“ precision.....	17

## W

Wall bracket for induction coils.....	8
“ “ “ instantaneous exposures .....	37
“ “ “ tubes .....	49
“ board.....	49
Wehnelt muffler.....	12
“ cryptoradiometer .....	45
“ electrolytic interrupter.....	11

## X

X-ray equipments.....	64
X-ray tables.....	38
“ chair .....	39
“ flat films.....	56
“ operating table.....	41
“ paper .....	56
“ plate .....	56
“ stereoscopes .....	54, 55
X-ray tubes.....	
“ “ Green & Bauer.....	23
“ “ Gundelach .....	23
“ “ Monopol .....	22
“ “ Muller .....	21
“ “ water cooled .....	21, 22
“ “ with double anticathodes.....	24

## Appendix

Apparatus for High frequency.....	
-----------------------------------	--



## ANNOUNCEMENT.

A series of special catalogues embracing the modern Surgical Armamentarium inclusive of Electro-Surgical and Electro-Therapeutic apparatus and instruments is in course of preparation.

Applications for copies in which the medical profession is interested should be made at an early date.

### PART

#### Section A.

1. Instruments for Anatomy and Pathology.
2. Instruments and Apparatus for Microscopy and Bacteriology.
3. Instruments for Experimental Physiology and Vivisection.
4. Instruments for General Diagnosis, Blood and Urine Examinations, etc., etc.
5. Instruments for Phlebotomy, Cupping, Bleeding, Vaccination, etc.
6. Instruments for Subcutaneous and Intravenous Injection, Lumbar Puncture, etc.
7. Infusion and Transfusion.
8. Instruments for Wound Dressing, Syringes, Irrigators, Pus Basins and Sundry Accessories.
9. Vacuum Apparatus for the Induction of Artificial Hyperemia in the Treatment of Inflammatory Diseases, designed by Dr. Aug. Bier.

### PART

#### Section B.

1. Instruments and Apparatus for Narcosis and Local Anesthesia.
2. Instruments for Arterial Compression, Amputation, Resection, Bullet Extraction and Trepanation.
3. Instruments for Suturing, Surgical Needles, Suture Material, etc.
4. Instruments for Surgical and Plaster of Paris Dressings, Splints and Splinting Material.
5. Instruments for Physicians' Pocket Cases.
6. Instruments for Aspiration, Paracentesis, etc.
7. Instruments for Thermo-Cauterisation.

### PART

#### Section C.

1. Instruments for Ophthalmic Operations.
2. Instruments for Aural Operations.
3. Instruments for Aiding the Deaf.
4. Instruments for Operation on the Nose and Pharynx.
5. Instruments for Plastic and Dermatological Operations.
6. Instruments for Performing Tracheotomy and Intubation.
7. Instruments for Performing Tonsillotomy and Operations on the Uvula.
8. Instruments for Oral and Laryngeal Operations.
9. Instruments for Bronchoscopy, Oesophagoscopy and Gastroscopy.
10. Illuminating Instruments for Laryngeal Examinations.
11. Instruments for the Inhalation of Atomized Medicaments in liquid form or powder.

### PART

#### Section D.

1. Instruments for the Male Urethra and Bladder.
2. Instruments for Electro-Cystoscopic and Endoscopic Examinations.
3. Instruments for Lithotomy Operations.
4. Instruments for Tapping the Bladder.
5. Instruments for Hernial and Intestinal Operations.
6. Instruments for Prostatectomy.
7. Instruments for Anal and Rectal Operations.

### PART

#### Section E.

1. Obstetrical Instruments and Phantoms.
2. Gynecological Instruments.

### DENTAL INSTRUMENTS.

Assortment of a limited line of dental instruments as required by the physician.

### PART

#### Section G.

1. GALVANISATION.
  - a. Léclanché and Dry Cell Batteries.
  - b. Combination Apparatus for Galvanisation, Faradisation, Electrolysis and Cataphoresis.
  - c. Hydro-Electric Baths. Electrodes and Appliances for the same.
  - d. Electrodes and Electrode Handles for general galvanisation and faradisation.
  - e. Special Electrodes for the Eye, Ear, Throat, Oesophagus, Stomach, Rectum, Urethra and Bladder, Scrotum, Perineum, Vagina and Uterus.
  - f. Interrupters, Rheostats and Galvanometers.
  - g. Electrolytic Instruments and Batteries.
  - h. Cataphoretic Electrodes and Batteries.
2. FARADISATION:
  - a. Induction Apparatus and Cells.
3. FRANKLINISATION:
  - a. Static Machines and Accessories.
4. GALVANO-CAUTERY, ENDOSCOPY AND DIAPHANOSCOPY.
  - a. Portable and Stationary Chromic Acid Batteries, Galvano-Cautery Handles and Burners, Hot Air Blast Apparatus.

- b. Electric Illuminating Instruments for diagnostic purposes and operative surgery, as: Headlights, Portable Desk Lights and Floor Stands for the examination of the Eye, Ear, Nose, Throat, Rectum and Vagina. Endoscopes and Cystoscopes.
- c. Diaphanosopic Instruments for the transillumination of Stomach, Rectum, Urethra, Throat, etc.

### PART

5. ACCUMULATORS OR STORAGE BATTERIES.
6. APPARATUS FOR CONNECTION WITH THE STREET CURRENT ARRANGED IN FORM OF WALL PLATES, TABLE PLATES AND MOTOR GENERATORS.
  - a. Direct current for Faradisation, Galvanisation, Electrolysis, Cataphoresis, Endoscopy and Galvano-Cautery.
  - b. Alternating current same as above.
7. ELECTRO-MOTORS FOR SURGICAL OPERATIONS, VIBRATORY MASSAGE, ETC.
  - a. Direct Current Motors.
  - b. Alternating Current Motors.
  - c. Surgical Cables and Shafts for Motors, Hand Pieces, Drills, Saws, Frasers, etc. Complete Surgical Motor Outfits.
  - d. Vibratory Massage Outfits, Vibratodes, etc.
  - e. Motor Attachments for Tympanum Massage, Air Compression and Air Suction. Centrifuges.
  - f. Direct Current Motor Transformers for three phase sinusoidal faradisation and surgical work. Alternating Current Motor Transformers for Galvanisation, Electrolysis, Cataphoresis and surgical work. Universal Apparatus.
8. SINUSOIDAL FARADISATION. (VOLTAISATION.)
 

Apparatus for one and three phase sinusoidal Faradisation for local treatment and baths.
9. ROENTGEN X-RAY APPARATUS.
  - a. Induction Coils and Transformers.
  - b. Interrupters.
  - c. Rheostats and Current Controllers.
  - d. Sources of current.
  - e. X-Ray Tubes.
  - f. Tube Stands.
  - g. Fluorescence Screens.
  - h. Diaphragms and Examining Tables.
  - i. Protective Appliances for Operator.
  - k. Orthodiagraphs.
  - l. Metric Instruments for determining the intensity of the current.
  - m. Sundry accessories for X-Ray Room.
  - n. Photographic Supplies.
10. ARSONVOLTAGE:
 

Application of High Frequency Currents.
11. ELECTRIC LIGHT AS A THERAPEUTIC AGENCY.
 

Light Bath Cabinets and Apparatus for local treatment. Light projection apparatus for local irradiation. Apparatus for concentration of the energy of the electric arc light in skin diseases.
12. ELECTRO-THERMO-THERAPY.
 

Electric Hot Air Baths.
13. ELECTRO-MAGNETIC THERAPY.
14. ELECTRO-MAGNETS AND SUNDRY ELECTRIC APPARATUS.

#### Section H.

Orthopædic Apparatus, Artificial Limbs, Trusses, Abdominal Supporters, Elastic Hosiery, Shoulder Braces, Suspensories, Splints, etc.

#### Section I.

A complete assortment of Instruments, Tools and Apparatus for the Veterinary Surgeon.

#### Section P.

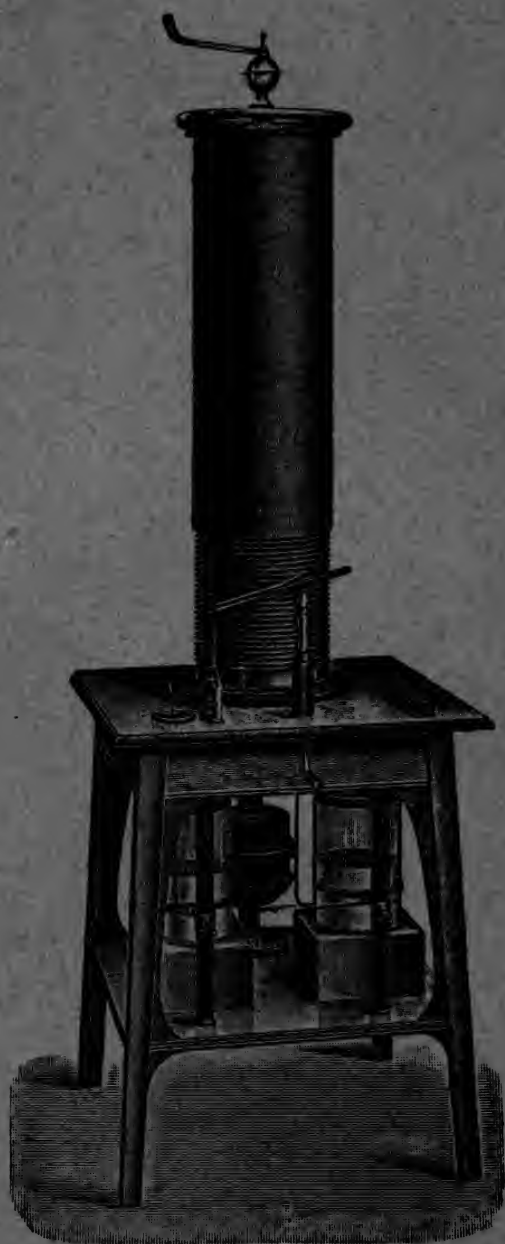
Invalids' Rolling Chairs, Fracture Beds, Invalids' Lifters, Crutches, Air and Water Beds, Bed Rests, Cuspidors and Pocket Sputum Flasks, Feeding Cups, Fountain Syringes, Ice Bags, Infants' Baths and Scales, Irrigators, Rubber Goods, Steam Baths, Urinals, etc., etc.

#### Section Q.

Aseptic Steel Cabinets for Surgical Instruments and Dressings, Aseptic Operating and Examining Tables, Aseptic Instrument and Dressing Tables, Ward Furniture, Washstands, etc., etc. Sterilizers for Instruments, Dressings and Water for Physicians' Offices and Hospitals for the sterilization by steam under pressure and under pressure of 15 pounds per square inch. Disinfecting Apparatus by means of chemical and physical agents.

Physicians interested will please apply.









COUNTWAY LIBRARY OF MEDICINE

RC

78.5

K78

1908

RARE BOOKS DEPARTMENT

